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ABSTRACT

A statewide telephone survey of over 1,500 household heads in 58 Massachusetts cities and towns, conducted soon after the passage of Proposition 2 1/2 in November 1980, sought to discover why voters favored the law and what public services they wanted. Proposition 2 1/2 not only restricted Massachusetts property taxes but also reduced automobile excise taxes, allowed deductions for rent from taxable income, removed school committees' fiscal autonomy, and altered other government practices. This document presents the survey results in five sections. Section 1 relates voters' knowledge and expectations about Proposition 2 1/2 to their desires for changes in government services in order to explain the vote. Survey results are analyzed by community in section 2 and compared to Boston residents' views. Section 3 uses multivariate analysis to examine the effects of several public policy issues, such as tax reform and government inefficiency, on voters' expectations and preferences. Section 4 turns to the same methodology to analyze the effects of community fiscal and demographic characteristics and of respondents' attitudes toward government. The final section discusses the way attitudes toward education affected the vote. Three appendices present the questionnaire and further methodological information. (Author/RW)

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EA 014 987

TAX LIMITATIONS IN MASSACHUSETTS

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Prepared for the National Institute of Education
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INTRODUCTION

On November 4, 1980, Massachusetts voters passed Proposition 2 1/2 by a 59 to 41 percent majority. Proposition 2 1/2 severely restricts the ability of Massachusetts cities and towns to raise money for local public services. This initiative law requires high tax rate communities to reduce property taxes by at least 15 percent per year until they reach the maximum allowable rate of 2 1/2 percent of full cash value. Communities with effective tax rates below 2 1/2 percent are allowed to raise taxes, but by no more than 2 1/2 percent per year. In addition, Proposition 2 1/2 reduces the auto excise tax rate from $66 to $25 per $1,000 of valuation. Together, these provisions mean that tax revenues available to Massachusetts cities and towns in fiscal year 1982 will be approximately $500 million less than in 1981, and that all cities and most large towns will experience revenue reductions of at least 15 percent during the first year.[1]

Proposition 2 1/2 also removes fiscal autonomy of school committees, ends binding arbitration for police and fire personnel, prohibits the state from mandating programs without providing funds, and allows renters to deduct one-half of their rent payments from their state taxable income.

Proposition 2 1/2's success at the polls raises many questions about what Massachusetts voters were trying to say. Did they want fewer public services? If so, did they want to reduce all services equally, or some more than others? Did they want to shift away from an overburdened property tax to other revenue sources or did they want lower taxes in general? Was the vote a protest against government inefficiency? If so, were people protesting inefficiency in local or state government, or both?

To answer these questions, we conducted a statewide survey during the two weeks immediately following the November election. The survey consisted of half-hour telephone interviews conducted by a professional survey research firm. The sample includes 1,581 male and female household heads randomly selected from 58 Massachusetts cities and towns. These communities were chosen randomly from groups of relatively homogeneous cities and towns. The sampling design assures that the 58 communities are representative of cities and towns throughout the state in terms of per capita property wealth, per capita expenditures, population, and percent of owner-occupied housing.[2]

Although based on a single state, the results reported here should be useful to policy makers in other states and to academicians trying to understand the message of the nationwide "tax revolt". This detailed examination of the Massachusetts experience is particularly enlightening for a number of reasons. First, a vigorous campaign combined with thorough media coverage assured that Massachusetts residents were well informed both of the Proposition's provisions and of the issues. This means that the Massachusetts situation provides an ideal setting for examining how voters' views toward complex public sector issues influenced their voting behavior. Second, the absence of a state surplus meant that if Proposition 2 1/2 passed, state and local governments in the Commonwealth would be faced immediately with hard choices. This contrasts with the well-studied California situation where the existence of a large state surplus made it easy for people to believe that the tax limitation measure would not lead to service cuts. Third, voters were basically making a decision on a single tax limitation proposal. Although the Massachusetts Teachers' Association had placed an alternative tax limitation measure on the ballot, the Association chose to campaign against Proposition 2 1/2 rather than for its own proposal. With no organized support for the Association's proposal, its presence on the ballot appears to have played little role in the Proposition 2 1/2 vote.[3] This situation is quite unlike the 1978 Michigan experience where the presence of alternatives and confusion about what would happen if two or more of the measures received majority support may have influenced voting behavior in a non-generalizable way.[4]

It should be noted that Massachusetts' Proposition 2 1/2 is an initiative law rather than a constitutional amendment. This means that, once passed by the voters, it became a regular law subject to change by the legislature. Although this characteristic of Proposition 2 1/2 should be borne in mind in interpreting the results of this study, the difference between an initiative law and a constitutional amendment should not be overstated; state legislators are generally reluctant to undo what has been willed by a majority of the voters, particularly when the majority is large.[5]

The next section describes Massachusetts' governmental structure and the tax situation that set the stage for Proposition 2 1/2. Section III then provides an overview of the full report.

II. MASSACHUSETTS CONTEXT

Massachusetts has a relatively simple governmental structure. Its 351 cities and towns levy all the property taxes in the state. Both the county governments which have few responsibilities and the limited number of special districts finance their budgets by assessing the cities and towns. Moreover, the property tax is the only broad-based tax available to cities and towns. Aside from small amounts of revenue from the motor vehicle excise tax, which is levied at a statewide uniform rate, charges, fees and state and federal aid provide municipalities' only other revenue. Cities and towns have broad expenditure responsibilities, but, since 1968, the state-local portion of welfare expenditures has been financed fully at the state level. Most school-district boundaries are coterminous with those of cities and towns. Before Proposition 2 1/2, school committees enjoyed fiscal autonomy in the sense that each city or town legislative body was required to accept the school budget as proposed by the school committee and to raise the necessary property taxes as part of the municipal tax levy.

By the fall of 1980, Massachusetts was ripe for a stringent property tax limitation measure. Property tax burdens expressed either per capita or per $1000 of personal income were among the highest in the United States.[6] Moreover, property tax burdens had continually risen despite state officials' claims that new state aid and state assumption of certain local expenditure responsibilities would provide property tax relief. A 1978 classification amendment forestalled the dramatic shift of tax burdens away from business onto residential property that had been feared as an outcome of the court-ordered shift to 100 percent assessment; it did nothing, however, to reduce the average property tax burden.[7] And a 1979 state law limiting the growth of local tax levies to four percent per year was only partially successful. The combination of the tax cap and new state aid contributed to a small decline in property taxes in 1980, but the tax cap failed to prevent an 10.2 percent increase in 1981. Given the chance to vote on Proposition 2 1/2, voters took matters into their own hands and in many cases voted themselves a 15 percent property tax reduction in the first year, with additional reductions promised in future years for taxpayers in high tax rate towns and cities.

Because of the 62 percent immediate reduction in the motor vehicle excise rate, every town and city faces some revenue loss during Proposition 2 1/2's first year, fiscal year 1982. The overall impact of Proposition 2 1/2 varies dramatically across communities, however, since the law allows some types of communities to increase property taxes by 2 1/2 percent during the first year, but requires other communities to reduce property tax levies by 15 percent. The overall first-year impacts range from small revenue losses in those communities permitted increases in property tax revenues to substantial losses in those communities required to reduce property tax levies. Impacts in subsequent years are even more unevenly distributed across communities; most large cities in the state face several years of 15 percent property tax reductions at the same time that many wealthy towns will be allowed to increase property tax revenues by 2 1/2 percent per year.

III. OVERVIEW OF REPORT

This final report consists of a set of five separate but related papers. We chose this format because the study was designed to serve a range of audiences from academicians to policymakers. With a series of separate papers, any individual reader can focus on those papers which he or she finds most useful.

In "Proposition 2 1/2: Explaining the Vote", we use responses from the basic sample of 1,561 respondents to determine, first, how much Massachusetts residents knew about Proposition 2 1/2 and what they expected it to do and, second, what they wanted in the way of changes in service levels, taxes, and the way government operates, independent of Proposition 2 1/2. We then combine respondents' expectations about the effects of Proposition 2 1/2 with their preferred outcomes to explain what motivated people to vote for or against the Proposition.

"Proposition 2 1/2: Variations in Individual Preferences and Expectations Across Communities" extends the descriptive analysis by disaggregating some of the survey results by type of community. Supplementing the basic sample with interviews from an additional 94 Boston residents, this paper separately analyzes the views of Boston residents and compares them to the views of residents in other cities and towns.

The use of multivariate regression analysis to explain voting behavior on Proposition 2 1/2 distinguishes the next two papers from the first two. In "Why Voters Suppor Tax Limitations: Evidence From Massachusetts' Proposition 2 1/2," voters' preferences for public sector change and their expectations about what Proposition 2 1/2 would do are used to explain voting behavior. This behavioral model is then used to estimate the relative contribution of each of a number of public policy issues to the statewide vote for Proposition 2 1/2.

In "Who Supports Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2," voting behavior is modeled as a function of the fiscal characteristics of respondents' communities, demographic characteristics and respondents' attitudes toward the role of government. By shedding light on who supports Proposition 2 1/2 rather than why they support it, the results from this paper complement those from the behavioral model.

Because local public schools rely heavily on property taxes in Massachusetts, the property tax reduction required by Proposition 2 1/2 has potentially major implications for elementary and secondary education. "Education and Tax Limitations: Evidence from Massachusetts' 1980 Election" shows the extent to which views toward education influenced the votes for or against both Proposition 2 1/2 and the Massachusetts Teachers' Association alternative proposal. This paper also includes a detailed examination of how residents' views on education vary by demographic characteristics.

The final appendices describe the sampling plan, interviewing process and estimation procedure used for filling in missing income data.

FOOTNOTES

[1] First year revenue losses were initially estimated to be close to $600 million. In July, 1981, however, the Department of Revenue estimated that the first year losses would be about $486 million. Of this, $321 million is the net reduction in property tax levies; this is about ten percent of the fiscal year 1981 property tax collections of 3.3 billion.

[2] See Appendices A and B of this report for a full description of the sampling plan and interviewing procedure. Because of an interviewing error, only 25 of the 55 interviews for the city of Salem were conducted. To offset this error, each Salem respondent was given a weight of two throughout the analysis.

[3] The Massachusetts Teachers' Association proposal was defeated by a 36 to 64 percent vote.

[4] See Courant, Gramlich and Rubinfeld (1980 and 1981) for an analysis of the Michigan vote and the comments by Oakland in Ladd and Tideman (1981).

[5] To check whether people would have voted differently had Proposition 2 1/2 been a constitutional amendment, respondents were asked whether or not they though Proposition 2 1/2 was an amendment to the Constitution. Those respondents who answered correctly were then asked how they would have voted had it been a constitutional amendment. A comparison of these responses with their reported votes shows a small net shift of 40 votes against the Proposition (out of our total voter sample of 1,253 respondents) had it been a constitutional amendment.

[6] In 1979, property tax burdens in Massachusetts were the highest of any state in the continental United States, both expressed per capita and per $1,000 of personal income. The 1979 per capita burden of $545 was almost double the United States average of $280. Total state and local taxes and spending in Massachusetts were also somewhat above the national average, but less so than property taxes. In FY1980, state and local direct general expenditures per capita in Massachusetts exceeded the United States average by 11 percent. For other fiscal comparisons, see Bradbury, Ladd, and Christopherson.

[7] The 1978 classification amendment is described and analyzed in Avault, Ganz and Holland (1979).

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PROPOSITION 2 1/2:
EXPLAINING THE VOTE

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January 1982

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INTRODUCTION

On November 4, 1980, Massachusetts voters passed Proposition 2½ by a 59 to 41 percent majority. Proposition 2½ severely restricts the ability of Massachusetts cities and towns to raise money for local public services. This initiative law requires communities to reduce property taxes by at least 15 percent per year until they reach the maximum allowable rate of 2½ percent of full cash value. Communities with effective tax rates currently below 2½ percent are allowed to raise taxes, but by no more than 2½ percent per year. In addition, Proposition 2½ reduces the auto excise tax rate from $66 to $25 per $1,000 of valuation. Together, these provisions mean that tax revenues available to Massachusetts cities and towns in fiscal year 1982 will be approximately $557 million less than in 1981, and that all cities and most large towns will experience revenue reductions of at least 15 percent during the first year.[1]

Proposition 2½ also removes fiscal autonomy of school committees, ends binding arbitration for police and fire personnel, prohibits the state from mandating programs without providing funds, and allows renters to deduct one-half of their rent payments from their state taxable income.

Proposition 2½'s success at the polls raises many questions. What were the voters trying to say? Did they want fewer public services? Or did they think spending could be cut without service reductions? Did they want to shift away from an overburdened property tax to other revenue sources? Or did they want lower taxes? Was the vote a protest against government inefficiency? If so, were people protesting inefficiency in local or state government, or both?

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[1] The revenue loss estimates are based on figures released on March 6, 1981 by the Massachusetts Department of Revenue as reported by the Boston Globe (March 7, 1981). Of the $557 million revenue loss, $225 million represents the estimated loss in excise tax revenues over an 18 month period and $332 million the net reduction in property tax revenues. Property tax collections during fiscal year 1981 were approximately $3.3 billion.

Unlike California at the time Proposition 13 was passed, Massachusetts has no state budget surplus available as a source of new state aid for local government. This makes the policy choices in Massachusetts particularly difficult. Should the state government bail out the cities and towns? If so, should the money come from increases in state taxes or reductions in other state expenditures? Or should state officials interpret the vote on Proposition 2½ as a protest against local government alone and leave these governments to fend for themselves?

To answer these questions, we conducted a statewide survey during the two weeks immediately following the November election. This paper reports the first set of survey results. Our findings should contribute to the current policy debate by helping policy makers interpret the vote on Proposition 2½ and better understand what Massachusett's citizens want in the way of changes in service levels, tax reform, and government operations.

The survey consisted of half-hour telephone interviews conducted by a professional survey research firm. The sample includes 1,561 male and female household heads randomly selected from 58 Massachusetts cities and towns. These communities were chosen randomly from groups of relatively homogeneous cities and towns. Our sampling design assures that the 58 communities are representative of cities and towns throughout the state in terms of per capita property wealth, per capita expenditures, population, and percent of owner-occupied housing (see appendices A, B, and C).

The study is divided into three sections. Section I focuses on respondents' knowledge of and expectations about the effects of Proposition 2½ at the time of the election. Results in this section show what voters thought they were voting for. Section II examines the changes Massachusetts citizens would like to see in service levels, taxes, and the way government operates, independent of Proposition 2½. In Section III, we combine the results from Sections I and II to explain what motivated people to vote for or against the Proposition.

SUMMARY

We report results for three categories of people: total respondents, "yes" voters, and "no" voters. "Yes" voters are those who said they voted in favor of Proposition 2½. "No" voters are those who said they voted against it. "Total respondents" include "yes" and "no" voters and those who did not vote on the Proposition. Our sample includes 1586 respondents, of whom 721 are "yes" voters and 522 are "no" voters.

We restricted the sample to heads of households (both male and female). Consequently, our "yes" voters and "no" voters are representative of heads of households supporting or opposing Proposition 2½, rather than of all "yes" and "no" voters. Among the respondents who said they voted on Proposition 2½, 58 percent voted for and 42 percent voted against it. These percentages are very similar to the actual vote: 59 percent voted for and 41 percent voted against Proposition 2½.

We report results relating to three major policy topics: size of public sector (defined by service levels), tax reform, and government operations. For each topic, we focus on what changes respondents want and what they expected Proposition 2½ to accomplish.

Massachusetts residents are generally content with their pre-Proposition 2½ levels of services. On average, respondents want to keep state-provided services at current levels and to increase [illegible]al services somewhat. When asked about specific services, a majority of respondents want to increase such services as mental health programs, elderly services, and special education for children with learning problems. Only in the case of welfare d[illegible] majority of respondents support service reductions.

Most respondents recognized that Proposition 2½ would require reductions in public services. More than half, however, thought that basic municipal services such as police protection, fire protection, and garbage pick-up would not be cut. "Yes" voters were less likely than "no" voters to expect service reductions because of Proposition 2½. Only a third of the "yes" voters, in contrast to two-thirds of the "no" voters, expected cutbacks in the services used regularly by their household.

Most Massachusetts residents want to retain the property tax as the major source of revenue for traditional municipal services such as police and fire protection. Many, however, would like to reduce reliance on the property tax for financing other services such as local public transportation and special education. Among those who want a greater share of revenues for particular services to come from state taxes, respondents overwhelmingly prefer state income to state sales taxes. For several local public services, many "yes" voters would like to see heavier reliance on user charges.

Nine in ten "yes" voters expected property taxes in Massachusetts to go down because of Proposition 2½. While many expected these property tax reductions to be offset in part by higher state taxes, 6 in 10 of the "yes" voters expected the overall taxes paid by their household to go down. "No" voters were less optimistic. Only 2 in 3 "no" voters expected property taxes to fall and less than 2 in 5 expected the overall taxes paid by their households to go down. "Yes" voters were more likely than "no" voters to expect additional state aid for local governments, but, unlike the "no" voters, did not expect Proposition 2½ to lead to more control over local matters.

Respondents think Massachusetts government is both inefficient and corrupt, particularly state government. Seventy-three percent of all respondents think spending by state government could be cut back by 15 percent or more without affecting the quality or quantity of services provided and 88 percent of the respondents believe that corruption is common in state government. Attitudes toward local governments are similar; 60 percent of all respondents think spending by their local government can be cut by 15 percent or more without affecting the quality or quantity of services provided, and 63 percent believe that corruption is common in their local government. "No" voters are most concerned about inefficiency and corruption in the state government. "Yes" voters are concerned about these problems in both state and local government.

"Yes" voters and "no" voters had very different expectations about whether Proposition 2½ would change the way government operates. More than 4 in 5 "yes" voters--compared to only 2 in 5 "no" voters--expected Proposition 2½ to reduce inefficiency and corruption in Massachusetts government. This finding helps explain how "yes" voters were able to reconcile expected reductions in spending and taxes with expectations of minimal service cutbacks.

The issue of government inefficiency and corruption most clearly differentiates "yes" from "no" voters. Seventy-five percent of the "yes" voters--in contrast to 32 percent of the "no" voters--both perceive inefficiency and corruption and expected Proposition 2½ to improve the situation. Preferences and expectations about the size of the public sector also differentiate "yes" from "no" voters, but are less important in explaining the favorable vote since so few voters want to reduce public services. Finally, most Massachusetts residents want tax reform. Since views about tax reform differ only slightly between "yes" and "no" voters, however, the issue of tax reform does not explain why some voted for and others against Proposition 2½.

Section I

KNOWLEDGE AND ANTICIPATED EFFECTS OF PROPOSITION 2½

How much did people know about Proposition 2½ at the time of the election? The variety of separate provisions may have confused voters. Did they understand that Proposition 2½ reduced local but not state taxes? Did they know that it ended school committee autonomy and binding arbitration for policemen and firemen?

Even more important, what did people think the effects of Proposition 2½ would be? Did they expect it to lead to service cutbacks? If so, in what areas? Did they anticipate lower overall taxes, or just lower property taxes? Finally, did voters expect Proposition 2½ to make government more efficient and less corrupt? Answers to these and similar questions are important in understanding why people voted for or against Proposition 2½.

A. Knowledge of Provisions Included in Proposition 2½

Widespread publicity assured that most people had heard of Proposition 2½ before the November 4, 1980 election. We find, however, that people differed in their knowledge of the proposition's provisions.[1]

More than three in four respondents thought correctly that the proposition included provisions about property taxes, excise taxes, and rent reductions. Sixty percent of the respondents thought the measure ended binding arbitration and reduced the power of school committees. In all of these cases, "yes" voters appear to have been slightly more knowledgeable than "no" voters. Table I-1 summarizes these findings.

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[1] We restricted knowledge and awareness questions to our first 501 interviews because of the length of our survey and our fear that post-election publicity would bias respondents' recollections. This smaller sample is similar to the complete sample, but slightly overrepresents towns and women. For a comparison of the demographic characteristics of the two samples, see Appendix C.

The most surprising finding is that 60.6 percent of the total and 69.6 percent of those voting "yes" stated incorrectly that Proposition 2½ limits state government taxes and spending. This confusion may reflect respondents' expectations about how the state legislature would respond to Proposition 2½ (see Section I-C), their misperceptions about which services are financed by property taxes (see Section II-D), or their desires to reduce state as well as local taxes and spending (see Section II-B). Whatever the reason, the finding is important; it shows that many people expected Proposition 2½ to limit state government as well as local government taxes and spending.

The following sections discuss what respondents expected the effects of Proposition 2½ to be on public services, state-local relations, government operations, and the economic climate of the state.

B. Anticipated Cuts in Public Services Due to Proposition 2½

Local Public Services. Most respondents recognized that Proposition 2½ would require reductions in the public services available in their communities. More than half, however, thought that basic municipal services such as police protection, fire protection and garbage pick-up would not be cut.

As shown below, 69 percent of the total sample anticipated that local community services would be cut back either a lot or a little. People voting against the measure were more pessimistic than those voting in favor. Eighty-five percent of the opponents, compared with only 60 percent of the proponents, expected local services to be cut; and nearly six times as many opponents as proponents thought Proposition 2½ would force their communities to cut back local services a lot (46.1% vs. 8.1%).

Table I-1

KNOWLEDGE OF THE PROVISIONS INCLUDED IN PROPOSITION 2½[a,b]

By Vote on Proposition 2½

Proposition 2½:	Total	Vote on Proposition 2½		Difference: Vote Yes Minus Vote No
		Yes	No	
Limits Property Taxes to 2½% of Market Value				
Included	80.4%	85.7%	75.0%	+10.7%
Not included	15.1	12.1	18.6	
Don't know	4.5	2.2	6.4	
Cuts Auto Excise Taxes				
Included	84.5	91.3	86.0	+ 5.3
Not included	12.5	7.4	12.8	
Don't know	2.9	1.3	1.2	
Allows Tenants to Deduct Half of Their Annual Rent in State Income Tax Returns				
Included	75.3	79.1	72.7	+ 6.4
Not included	15.1	12.6	18.0	
Don't know	9.6	8.3	9.3	
Limits State Government Taxes and Spending				
Included	60.6	69.6	46.5	+23.1
Not included	34.7	28.3	48.3	
Don't know	4.7	2.2	5.2	
Ends Binding Arbitration For Policemen and Firemen				
Included	61.0	63.9	61.6	+ 2.3
Not included	26.9	25.2	27.3	
Don't know	12.2	10.9	11.0	
Takes Away the Power of School Committees To Set School Budgets				
Included	60.8	63.0	64.5	- 1.5
Not included	31.2	31.3	27.3	
Don't know	8.0	5.7	8.1	

---

[a] Based on the question: "Now I'd like to talk to you about Proposition 2½. As you probably know, Proposition 2½ contains a number of provisions. Other people we have talked to told us what they think is included. I'd like to read you some statements and have you tell me, based on everything you have heard or read, whether you think each of these is included or not included in Proposition 2½. Does Proposition 2½..."

[b] This table is based on a sample of 501 interviews. See Appendices B and C.

ANTICIPATED EFFECTS OF PROPOSITION 2½ ON COMMUNITY SERVICES

	Services in my community will be:				
	Cut back a lot	Cut back a little	Remain the same	Increased a little	Increased a lot
Total Respondents	23.2%	46.0	25.8	4.0	1.0
Voted yes	8.1%	52.6	35.1	3.6	0.6
Voted no	46.1%	39.5	11.4	2.3	0.8

Specific Services. To determine expectations about specific services, we asked respondents how they thought Proposition 2½ would affect each of fifteen services. The services include traditional municipal services (police, fire, street repair, garbage pickup, parks and public transportation), locally financed education services (elementary and high school education, after-school programs, special education and adult education), human resources services (mental health services, elderly services, and colleges), courts and judges, and welfare or other public assistance programs.

Most respondents thought basic security services would not be affected by Proposition 2½.

- Fewer than half the respondents thought Proposition 2½ would force cuts in basic municipal services such as police protection (43.3%), fire fighting (40.7%), and regular garbage pick-up (39.6%).
- Only one in three respondents expected cuts in legal services.

In contrast, more than half the respondents expected Proposition 2½ to result in cutbacks in seven of the fifteen services.

- Many respondents expected cutbacks in locally financed education services, particularly after-school programs (71.4%), adult education (63.9%) and public elementary and high school education (56.4%).
- Slightly more than six in ten respondents (62.9%) thought welfare and other public assistance programs would be cut back.
- A majority of the respondents expected three of the traditional municipal services to be cut back -- public parks and recreation

Table I-2

PERCENTAGE OF RESPONDENTS EXPECTING SERVICE CUTBACKS BECAUSE OF PROPOSITION 2½[a,b]

By Vote

Service Type	Total Respondents	Vote on Proposition 2½ Yes	No
Municipal Services			
Police	43.3 %	28.2 %	66.7 %
Fire fighting	40.7	25.8	62.6
Street & sidewalk repairs	57.2	47.2	73.8
Regular garbage pickup	39.6	31.0	53.5
Local public parks and recreation	61.5	53.4	77.0
Support of local public transportation	54.1	46.9	65.7
Local School-related Services			
Public elementary and high school education	56.4	45.1	77.7
After school programs	71.4	65.9	82.1
Special education	49.9	37.4	69.6
Adult education	65.9	60.8	77.6
Human Resources Services			
Mental health programs	49.0	38.3	66.8
Services for the elderly	48.7	33.5	71.4
State and community colleges and universities	54.4	48.9	63.3
Legal Services			
Courts and judges	31.7	25.0	37.9
Public Assistance			
Welfare or other public assistance	62.9	64.7	64.9
Local services	69.3	60.8	85.6
Services my household uses	47.8	35.0	67.1

[a,b] Footnotes on following page.

[a] Based on the questions:
"Now that Proposition 2½ has passed, what do you think will happen to services I read. Using the first list of phrases tell me whether you think there will be a lot less, a little less, the same, a little more or a lot more ("X'd ITEM) services now that Proposition 2½ has passed?"

"Overall, how do you think the passage of Proposition 2½ will affect your community--do you think the services your local government offers will be cut back a lot, cut back a little, remain the same, increase a little or increase a lot?"

"How about you and members of your household? Now that Proposition 2½ has passed, do you think the public services your household uses will be cut back a lot, cut back a little, remain the same, increase a little, or increase a lot?"

[b] Each entry is the percentage of respondents who think there will be a lot less or a little less of that particular service or who think that community or household services will be cut back a lot or cut back a little. Percentages are based on those responding to the question.

facilities (61.5%), street and sidewalk repairs (57.2%), and support for local public transportation (54.1%).

Opponents and supporters anticipated very different results from Proposition 2½. With one exception, supporters were much less likely than opponents to expect Proposition 2½ to force cutbacks in each of the fifteen services we included. The exception is welfare and related public assistance programs, for which over 60 percent of each group expected program cutbacks. (See Table I-2).

A majority of "yes" voters anticipated cutbacks in only three other services -- after-school programs, adult education and support of local public transportation. In sharp contrast, more than half of the "no" voters thought Proposition 2½ would force cutbacks in all other services except courts and judges. More than two-thirds of the "no" voters expected reductions in :

- locally financed education services, such as after-school programs (82.1%), public elementary and high school education (77.7%), adult education (77.6%), and special education [illegible]9.6%),
- traditional municipal services, such as street and sidewalk repairs (73.8%), and local public parks and recreation facilities (77.0%); and
- social service programs such as services for the elderly (71.4%) and mental health programs (66.8%).

Services Used by Respondent's Household. Some have interpreted the the favorable vote on Proposition 2½ as an expression of Massachusetts' voters willingness to sacrifice public services in return for lower taxes.

Although there may be some truth to this interpretation, many "yes" voters appear to have thought that someone else's services, not their own, would be the ones cut back. When asked how Proposition 2½ would affect the services used by their household, 65 percent of the supporters -- in contrast to 33 percent of the opponents -- said Proposition 2½ would leave them as well off or better off than before in terms of public services. Stated differently, only one in three supporters compared to two in three opponents anticipated cuts in the services used regularly by their household.

ANTICIPATED EFFECTS OF PROPOSITION 2½ ON SERVICES RESPONDENT'S
HOUSEHOLD USES

By Vote on Proposition 2½

Services my household uses will be:

	Cut back a lot	Cut back a little	Remain the same	Increased a little	Increased a lot
Total Respondents	9.6%	38.2	47.6	3.2	1.3
Voted yes	2.2%	32.8	62.2	2.4	0.4
Voted no	19.0%	48.2	29.8	1.6	1.6

Note: Percentages add to 100 across each row.

C. Anticipated Tax Changes Due to Proposition 2½

Did Massachusetts residents think the reduction in property taxes promised by Proposition 2½ would reduce their overall tax burdens? Or did they think that increases in other taxes would leave their total tax burdens no lower than before?

Tax Burden on Household. Nearly half the respondents (49%) thought the taxes paid by their household would decrease. Supporters of Proposition 2½ were much more optimistic than opponents. Sixty-one per cent of those who voted "yes" compared to only 36 percent of those who voted "no" expected their household taxes to go down.

ANTICIPATED EFFECTS OF PROPOSITION 2½ ON RESPONDENT'S TAXES

	Taxes paid by my household will be:				
Total Respondents	A lot less 10%	A little less 39	Same amount 31	A little more 15	A lot more 5
Voted yes	14%	47	28	9	2
Voted no	5%	31	35	21	8

Note: Percentages add to 100 across each row.

Statewide Tax Effects. Differing expectations about statewide tax impacts help explain the differing expectations about household tax impacts. Supporters were much more likely than opponents to believe that local property taxes in Massachusetts would fall. Moreover, supporters were also less likely to believe that Proposition 2½ would lead to higher state income or sales taxes. It should be noted that 54 percent of the "yes" voters expected state income taxes to increase, and an even larger percentage expected state sales taxes to increase. The "yes" voters apparently thought that any rise in their own state income or sales tax burdens would be more than offset by the reduction in their own property tax burdens. The "no" voters were more pessimistic.

PERCENTAGE AGREEING A LOT OR A LITTLE WITH STATEMENTS

ABOUT POSSIBLE EFFECTS OF PROPOSITION 2½ ON TAXES AND TAX REFORM

By Vote on Proposition 2½

Proposition 2½ will:	Total Respondents	Vote on Proposition 2½ Yes	No	Difference: Vote yes minus vote no
...lower property taxes in Massachusetts	82.1%	92.1%	67.6%	+24.5%
...increase Massachusetts state income taxes	60.8	53.5	74.8	-21.3
...increase state sales taxes	67.5	62.2	81.3	-19.1

Tax Reform. Most of the respondents expected Proposition 2½ to encourage the legislature to "reform taxes." Overall, 81 percent of the respondents expected to get tax reform; 91 percent of the "yes" and 69 percent of the "no" voters expected this outcome. But these results are difficult to interpret because we do not know what people meant by "tax reform." At a minimum, respondents appeared to mean property tax reduction, with some, but not all, including in the definition an offsetting increase in other taxes. Many of the "no" voters seemed to be worried that, instead of tax reform, the outcome would be higher overall taxes. In Sections II and III, we will explore the topic of tax reform in more detail.

PERCENT AGREEING A LOT OR A LITTLE

THAT PROPOSITION 2½ WILL ENCOURAGE THE LEGISLATURE TO REFORM TAXES

By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½		Difference: Vote yes minus vote no
		Yes	No	
Proposition 2½ will encourage state legislature to reform Massachusetts taxes	81.1%	91.3%	68.7%	+22.6%

D. Anticipated Changes in Local-State Relations Due to Proposition 2½

Supporters and opponents of Proposition 2½ also had very different expectations about the impact of the tax limitation measure on the relationship between state and local governments. Many supporters believed that the state would provide new aid to the cities and towns. Opponents, on the other hand, believed that increases in state income or sales taxes would simply allow the state to expand into areas traditionally left to local governments.

Fifty-six percent of the "yes" voters expected the state to increase aid to cities and towns, but only 34 percent anticipated more state control over local matters. In striking contrast, only 39 percent of the "no" voters expected more state aid while 61 percent anticipated more state control.

PERCENT AGREEING A LOT OR A LITTLE WITH STATEMENTS
ABOUT POSSIBLE EFFECTS OF PROPOSITION 2½ ON TAXES AND ON TAX REFORM
By Vote on Proposition 2½

Proposition 2½ will:	Total Respondents	Vote on Proposition 2½ Yes	No	Difference: Vote yes minus vote no
Increase state aid to cities and towns	48.7%	55.6%	37.8%	+17.8%
Give state government more control over local matters	45.8	33.6	60.7	-27.1

E. Anticipated Changes in Government Operations Due to Proposition 2½

Will local government operate differently? "Yes", said the supporters. Local voters will have more control over school spending and local governments will be more efficient. "Probably not", said the opponents.

Although Proposition 2½ ends fiscal autonomy of school committees, the provision's effects on voter control are uncertain. Even with fiscal autonomy intact, voters exerted some control over school committees through the election of school committee members. The question is whether voters will exert more control when school budget decisions come under the scrutiny of city councils or town meetings. Eighty-six percent of the supporters of Proposition 2½ expected this would happen. Opponents were less sure; only 52 percent of them expected more voter control.

More than 4 out of 5 "yes" voters thought Proposition 2½ would make local government more efficient. Supporters apparently believed that the removal of school-committee autonomy, plus the reduction in available tax revenues would force government to be more productive. "No" voters were more skeptical: three out of five disagreed with the view that Proposition 2½ would make local government more efficient.

PERCENT AGREEING A LOT OR A LITTLE WITH STATEMENTS ABOUT POSSIBLE EFFECTS OF PROPOSITION 2½ ON LOCAL VOTER CONTROL AND GOVERNMENT EFFICIENCY

By Vote on Proposition 2½

Proposition 2½ will:	Total Respondents	Vote on Proposition 2½ Yes	Vote on Proposition 2½ No	Difference: Vote yes minus vote no
Give local voters more control over school spending	70.8%	85.8%	51.8%	+34.0%
Make local government more efficient	65.2	84.8	38.4	+46.4

F. Anticipated Changes in the State Economic Climate Due to Proposition 2½

Almost 3 out of 4 Massachusetts residents polled expected Proposition 2½ to make the state more attractive to business and industry. People believing this were more likely than others to expect Proposition 2½ to lower property taxes and make local government more efficient. They were also less likely to believe that state taxes would be increased. This suggests that Massachusetts residents believe lower property taxes will attract business and industry, provided that the lower property taxes are not offset by new state taxes. As discussed above, "yes" voters were more likely than "no" voters to expect this tax outcome. Thus, it is not surprising that "yes" voters were more likely than "no" voters to expect Proposition 2½ to lead to increased business investment in the state (87.5% vs. 54.4%).

PERCENT AGREEING A LOT OR A LITTLE THAT PROPOSITION 2½
WILL ATTRACT MORE BUSINESS AND INDUSTRY TO MASSACHUSETTS

By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½		Difference: Vote yes minus vote no
		Yes	No	
Proposition 2½ will attract more business and industry to Massachusetts	73.6%	87.5%	54.4%	+33.1%

G. Most Important Changes Anticipated to Result from Proposition 2½

In addition to the questions previously discussed, respondents were asked: "Overall, what do you think will be the single most important change caused by Proposition 2½?" This open-ended format allowed respondents to state their views without the constraints of predetermined categories. Although we asked for the single most important change only, some respondents gave us more than one. Hence, total responses add to more than 100 percent, averaging about 1.3 responses per person.

Responses to this question reinforce our earlier findings that proponents of Proposition 2½ expected fewer service cuts and greater tax reductions than opponents. In their responses to this open-ended question, supporters of Proposition 2½ were more likely to focus on anticipated tax relief, while opponents were primarily concerned about the possibility of service cutbacks. Large proportions of "yes" voters cited lower taxes or more government efficiency and responsibility. Less than 10 percent of these voters cited service cutbacks as the most likely outcome. In contrast, half the "no" voters mentioned service cutbacks as the most important change, well over twice the number who mentioned lower taxes or increased efficiency. (See Table I-3).

This difference in emphasis on the part of supporters and opponents also emerges from other responses to this question.

- Eighteen percent of the "yes" voters — compared with only 3% of the "no" voters -- said Proposition 2½ would "send a message to the legislature." Although the exact nature of the intended message is not clear from the responses to the open-ended question, our findings on people's attitudes toward Massachusetts government suggest voters are saying: "We want more efficient, less corrupt government." (See Section III for more discussion).
- Supporters of Proposition 2½ were slightly more likely than opponents to mention tax reform as the most important outcome, while opponents were more likely to mention tax shifts. We noted earlier that "tax reform" is an ambiguous concept but probably means reduced taxes to many respondents. (See Section III for more discussion).
- Ten percent of the opponents of Proposition 2½ -- in contrast to one percent of the supporters -- expressed greatest concern about unemployment of public employees.

Further emphasizing the difference between supporters and opponents are the views of many opponents that Proposition 2½ will not work.

- Four times as many opponents as proponents thought Proposition 2½ would just cause problems and would not achieve the goals of its supporters (19.4% vs. 4.7%).

Table I-3

PERCEPTIONS OF MOST IMPORANT IMPACT OF PROPOSITION 2½[a]

By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½		Difference: Vote yes minus vote no
		Yes	No	
Lower Taxes	28.6%	37.5%	13.6%	+23.9%
More efficiency & responsibility, less corruption	20.2	30.9	8.4	+22.5
Cutback services	24.3	8.0	50.2	-42.2
Send a message	11.0	17.8	2.9	+14.9
Tax reform	6.3	8.2	5.4	+ 2.8
Tax shift	6.4	4.7	10.3	- 5.6
Unemployment of government workers	4.1	0.8	9.6	- 8.8
Government will spend less	6.3	7.8	5.0	+ 2.8
More investment in state	2.2	3.5	1.0	+ 2.5
Less power for school committees	3.3	5.4	1.3	+ 4.1
Less control at local level	0.9	0.3	1.9	- 1.6
Won't work/cause problems	11.2	4.7	19.4	-14.7
TOTAL	124.8	129.6	129.0	
Average number of responses per person	1.2	1.3	1.3	

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[a] Based on the question: "Overall, what do you think will be the single most important change caused by Proposition 2½?" Percentages are based on those responding to the question.

Section II

DESIRED CHANGES IN SERVICE LEVELS, TAXES AND GOVERNMENT OPERATIONS

We now turn to the issue of what Massachusetts residents want in the way of changes in service levels, financing arrangements, and government operations. In November 1980, state residents were given the choice of supporting or rejecting one alternative to the status quo. Massachusetts voters overwhelmingly opted for change. Section I described what respondents thought the effects of Proposition 2½ would be. But are those anticipated effects what Massachusetts residents really want? What level of state and local services do they want? How do they want to finance various services? What changes do they want in state and local government operations?

A. Preferred Level of State and Local Services

Overall state and local services. Massachusetts residents are generally content with the levels of public services they have been receiving. On average, respondents to this survey want to keep overall state government services at their pre-Proposition 2½ levels and to increase local services somewhat.

This average, however, conceals wide variation in respondents' preferences, especially with regard to state-provided services. While 25.9 percent of the respondents want to maintain state services at current levels, 35.4 percent want more, and another 38.7 percent want less. Preferences for local services exhibit slightly less variation, with nearly 7 in 10 respondents wanting either the current amount or slightly more.

LEVEL OF STATE AND LOCAL SERVICES PREFERRED

	Cut back a lot	Cut back a little	Keep the same	Increase a little	Increase a lot	Average[a]
State Services	11.3%	27.4%	25.9%	25.4%	10.0%	-0.50
Local Services	3.7	16.0	43.9	25.5	11.0	+0.24

[a] Based on a 5-point scale in which -2 = cut back a lot, -1 = cut back a little, 0 = keep the same, +1 = increase a little, +2 = increase a lot. Percentages add to 100 across each row.

Supporters of Proposition 2½ are more likely than opponents to want cutbacks in state and local services. Half the supporters -- compared with only a quarter of the opponents -- want to cut back state services. A third of the supporters -- compared to less than a tenth of the opponents -- want to cut local services.

PERCENTAGE WANTING TO CUT SERVICES A LOT OR A LITTLE

By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½ Yes	No	Difference: Vote yes minus Vote no
State Services	38.7%	53.7%	25.3%	+28.4%
Local Services	19.7	30.4	8.9	+21.5

Specific Services. This apparent satisfaction with the overall amount of state and local services obscures the fact that respondents prefer increases in some services and decreases in others. Respondents were read a list of fifteen state and local services and asked whether they would prefer a lot more, a little more, the same amount, a little less or a lot less of each. They were told that increases in services would mean higher taxes and that decreases in services would mean lower taxes.

For every service except welfare, more respondents want to increase

Table II-1

AMOUNT OF SERVICES PREFERRED[a,b]

By Vote on Proposition 2½

	Cut back a lot	Cut back a little	Keep the same	Increase a little	Increase a lot
MUNICIPAL SERVICES					
Police	3.3%	7.6%	55.1%	21.0%	13.1%
Voted yes	4.5	10.2	60.4	16.6	8.4
Voted no	1.0	4.6	53.6	24.8	16.1
Fire	2.5	6.5	71.1	12.7	7.2
Voted yes	3.0	10.0	75.9	7.6	3.6
Voted no	1.2	3.9	68.1	17.5	9.3
Street Repairs	3.9	6.1	50.1	22.9	17.0
Voted yes	5.5	8.4	52.8	20.8	12.6
Voted no	2.4	3.0	51.5	24.0	19.1
Garbage Pickup	5.3	7.6	73.1	8.2	5.8
Voted yes	7.7	10.9	72.4	5.8	3.2
Voted no	3.5	4.8	76.0	10.0	5.7
Parks & Recreation	3.6	10.2	53.1	21.4	11.7
Voted yes	5.5	13.4	55.4	17.1	8.6
Voted no	2.0	7.2	49.5	26.9	14.4
Local Public Transportation	11.9	9.8	28.9	23.3	26.0
Voted yes	16.7	12.5	28.2	23.3	19.2
Voted no	8.8	8.1	27.6	24.2	31.4
LOCAL SCHOOL-RELATED SERVICES					
Public Elementary & High School Education	4.1	13.0	44.3	22.3	16.3
Voted yes	6.0	17.4	49.6	17.2	9.7
Voted no	1.6	8.8	41.3	26.3	22.0
After school programs	7.6	15.2	46.2	16.7	14.3
Voted yes	11.1	20.2	47.4	13.2	8.1
Voted no	3.5	10.2	46.8	19.4	20.2
Special Education	3.5	7.6	34.0	27.3	27.6
Voted yes	4.6	11.1	38.4	25.2	20.7
Voted no	2.0	5.5	32.3	29.5	30.7

(continued)

Table II-1continued

AMOUNT OF SERVICES PREFERRED[a,b]

By Vote on Proposition 2½

	Cut back a lot	Cut back a little	Keep the same	Increase a little	Increase a lot
Adult Education	6.4	11.6	54.4	18.1	9.4
Voted yes	9.5	13.8	53.3	17.1	6.4
Voted no	3.9	8.8	58.2	19.3	9.8
HUMAN RESOURCES SERVICES					
Mental Health Programs	3.7	5.8	40.4	28.0	22.1
Voted yes	5.6	6.7	44.3	25.0	18.3
Voted no	1.9	5.3	34.3	32.1	26.4
Services for the Elderly	1.4	4.6	39.5	29.0	25.6
Voted yes	2.0	6.2	43.8	26.8	21.3
Voted no	0.4	3.4	37.6	32.1	26.5
State & Community Colleges & Universities	5.1	12.6	54.1	17.4	10.8
Voted yes	9.1	15.4	55.1	12.3	8.1
Voted no	1.4	8.7	54.3	23.8	11.7
LEGAL SERVICES					
Courts and Judges	6.5	14.2	46.4	20.7	12.1
Voted yes	9.1	17.4	44.1	18.4	11.0
Voted no	4.0	10.4	46.4	23.1	16.1
PUBLIC ASSISTANCE					
Welfare or other Public Assistance	27.9	26.7	28.7	11.0	5.7
Voted yes	37.8	30.1	23.0	5.8	3.2
Voted no	17.0	25.0	35.7	15.2	7.2
Local Services	3.7	16.0	43.9	25.5	11.0
Voted yes	6.3	24.2	44.8	17.3	7.4
Voted no	1.2	7.8	44.8	32.2	14.2
State Services	11.3	27.4	25.9	25.4	10.0
Voted yes	16.9	36.8	23.1	18.0	5.2
Voted no	6.3	19.6	27.6	32.6	13.9

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[a] Based on the question: "Think about the services provided by the state or local" government to residents of your town or city. For each service I read, please tell me whether state or local government should be providing a lot less, a little less, the same amount, a little more or a lot more of this service. Remember, if government provides less services state or local taxes will be reduced, and if government provides more services, state or local taxes will be increased. If the service is not available to residents in your city or town, please let me know. Let's begin with ("X'd" ITEM). Which phrase in the first list describes how much more or less ("X'd" ITEM) state or local government should provide?"

than decrease service levels. As Table II-1 illustrates:

- At least half the respondents want to increase the amount of services provided by social programs, such as elderly services, mental health programs, and special education for children with learning problems.
- Between 40 and 50 percent want to increase such traditional municipal services as police, street and sidewalk repairs, and support of public transportation.
- Almost 40 percent want to increase public elementary and high school education services.
- Over 50 percent want to decrease welfare or other public assistance. This is the only service of the 15 measured for which cutbacks were strongly supported.

Current users of the various services, younger respondents, lower income respondents, blacks, and renters are most likely to want greater amounts of almost all of the 15 services measured. Residents of cities are more likely to want service increases than residents of towns. Boston residents want even greater increases in their services than do residents of other cities. (Table not reported).

Preferences of "Yes" Voters vs. "No" Voters. Massachusetts residents in general express little interest in cutting back specific public services, except welfare services. Supporters of Proposition 2½, however, are slightly more interested than opponents in cutting back public services (see Table II-1). A greater proportion of "yes" than "no" voters express interest in cutting back each of the specific services. Yet even among "yes" voters, support for service cuts is not very strong. Welfare is the only public service which a majority of supporters want to cut. Among the supporters:

- Two out of three want to decrease welfare and other public assistance programs.
- Only one in four wants to cut education services, such as after school programs, public elementary and high school education, adult education, and state and community colleges and universities.
- Only three in ten want to reduce support for local public transportation.
- Only one in four wants to cut back the services of courts and judges.

Few "no" voters want to cut any of the specific services measured, except welfare. In fact, opponents of Proposition 2½ show considerable interest in increasing the level of public services and want to increase an average of 5.9 of the 15 services measured. Among the opponents:

- More than four in ten want to increase traditional municipal services, including police, street repairs, public parks and recreation, and support for local public transportation.
- At least four in ten want to increase local education services, including public elementary and high school education, after school programs, and special education.
- Nearly six in ten want to increase social services, including mental health programs and elderly services.

B. Amount Massachusetts Residents Are Willing to Spend on Services

In addition to asking about preferred levels of public services, we asked about preferred levels of government spending and taxes. "Compared to what the state government (or local government or local school system) now spends, by what percentage, if any, would you like to see state government (or local government or local public school) spending and taxes increase or decrease? You may answer any percent increase or decrease from 1 percent to 100 percent or tell me you want it to stay the same."

Despite wanting about the current level of state, local and educational services, the median respondent[1] wants to reduce spending and taxes. The median or typical respondent wants to cut back state spending 20 percent, cut back local spending 10 percent, and keep school spending at its current level.

DESIRED CHANGES IN TAXING AND SPENDING

	State	Local	School
Median spending change	-20%	-10%	0%
Percent wanting:			
--spending increase	15.9%	12.4%	20.0%
--no change	20.5	27.9	35.6
--spending decrease	62.8	58.6	44.4

Supporters of Proposition 2½ want greater cutbacks in taxes and spending than do opponents. The typical supporter wants a 20 percent reduction in state and local spending and a 10 percent reduction in school spending. The typical opponent wants a five percent reduction in state spending and no change in local spending or school spending.

C. Perceptions of Inefficiency and Corruption in Government

How can respondents' demands for less spending and taxing be reconciled with their apparent wish to maintain or increase services? This section shows that the gap can be explained in large part by residents' demands for more efficient and productive government.

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[1] The median respondent is the middle respondent. In other words, half the respondents want less taxes and spending than the median respondent, and half want more taxes and spending.

We obtained a measure of the extent of perceived government inefficiency and waste by asking respondents how much they think spending can be reduced without significantly affecting the quality and quantity of services provided. The table below shows that respondents think there is more waste in the state budget than in local budgets, and more in overall local budgets than in school budgets. The magnitudes are sufficiently large to account for the discrepancy between the large spending cutbacks desired and desires to maintain or slightly increase service levels.

AMOUNT RESPONDENTS THINK SPENDING AND TAXING CAN BE REDUCED WITHOUT SIGNIFICANTLY AFFECTING THE QUALITY AND QUANTITY OF SERVICES

	State Services	Local Services	Elementary & High School Education
Possible cutback (Average)	24%	19%	13%

Table II-2 summarizes respondents' perceptions of inefficiency for nine of the 15 services. For example, the table shows that 51 percent of the respondents think cuts of 5 percent or more in police budgets would significantly affect police services. Another 27 percent of the respondents disagree; they think police budgets could be cut by 15 percent or more without significantly affecting police services.

In the case of each service, "yes" voters are more likely than "no" voters to believe budgets can be cut substantially without affecting services. Despite the fact that "yes" voters perceive more inefficiency than "no" voters for any given service, the two groups hold similar views about which services are most inefficiently provided.

- Both groups think the greatest cuts can be made in the welfare and public assistance budget.
- Both groups think police, garbage and special education budgets are least amenable to spending cuts without service cuts.

Table II-2

BELIEFS THAT SPENDING CAN BE CUT
WITHOUT AFFECTING THE QUALITY OR QUANTITY OF SERVICES:
POSSIBLE CUTBACKS OF LESS THAN 5 PERCENT/POSSIBLE CUTBACKS OF 15 PERCENT OR MORE[a,b]

By Vote on Proposition 2½

Service Type	Total Respondents <5%/≥15%	Vote on Proposition 2½ Yes <5%/≥15%	No
Municipal Services			
Police	51%/27%	44%/33%	61%/17%
Fire fighting	NA	NA	NA
Street & sidewalk repairs	45/36	40/41	52/27
Regular garbage pickup	51/30	51/34	56/23
Local public parks and recreation	NA	NA	NA
Support of local public transportation	NA	NA	NA
Local School-related Services			
Public elementary and high school education	38/37	27/48	51/27
After school programs	42/34	35/40	55/24
Special education	58/22	51/26	66/16
Adult education	31/45	27/50	42/37
Human Resources Services			
Mental health programs	NA	NA	NA
Services for the elderly	NA	NA	NA
State and community colleges and universities	35/40	29/66	45/30
Legal Services			
Courts and judges	NA	NA	NA
Public Assistance			
Welfare or other public assistance	18/67	11/75	25/58
State Services	11/73	6/80	19/63
Local Services	18/60	10/69	30/46

[a,b] Footnotes on following page.

Table II-2, footnotes

[a] Based on the questions: "Now let's talk about some specific services. People we've talked to believe that government could cut back spending on these services by eliminating waste, inefficiency and other problems. By what percentage, if any, do you think government could cut back spending on ("X'd" ITEM) without significantly affecting the quality or amount of services provided?"

"And by what percentage, if any, do you think state government could cut taxes and spending without significantly cutting the amount of services?"

"Overall, by what percentage, if any, do you think your local government could cut taxes and spending without significantly cutting the amount of services?"

[b] Each entry has two numbers. The number to the left of the slash is the percentage of respondents who believe that spending cuts of 5% or more would significantly affect the quality or amount of service provided. The number to the right of the slash is the percentage of respondents who believe spending for that service could be cut by 15% or more without significantly affecting the quality or amount of services provided. Percentages are based on those responding to the question. NA means that the question was not asked.

Inefficiency means different things to different people. To some it means that resources such as worker time and tax money are not being used as productively as possible. To others it means that government resources are being used for the wrong purpose or by people not needing services. A series of attitude questions provide additional information on respondents' views about the extent of inefficiency in Massachusetts government.

Nearly half the respondents think local public employees are overpaid, and two-thirds think that local public employees do not work as hard as their private-sector counterparts. This suggests that many state residents believe their tax money is being wasted. In the same vein, when asked about the recipients of one particularly sensitive service --welfare-- over three in four respondents agree that "people now on welfare could find jobs if they really tried." As the table below shows, supporters of Proposition 2½ are more likely than opponents to believe that the public sector is inefficient according to these definitions.

PERCENTAGE AGREEING A LOT OR A LITTLE THAT GOVERNMENT IS INEFFICIENT

By vote on Proposition 2½

	Total Respondents	Vote on Prop. 2½		Differences: Vote yes minus Vote No
		Yes	No	
City or town employees are overpaid	47.1%	55.5%	30.9%	+24.6%
City or town employees don't work as hard as people who work for private companies	66.7	76.0	53.4	+22.6
People now on welfare could find jobs if they really tried	78.8	84.8	67.4	+17.4

Corruption also leads to wasteful government. Our respondents overwhelmingly agree that public sector corruption is common in Massachusetts. Eighty-eight percent of the respondents agree that "corruption is common in my state government" and 63 percent agree to a similar statement about local government. Supporters and opponents of Proposition 2½ hold similar views.

PERCENT AGREEING A LOT OR A LITTLE THAT GOVERNMENT IS CORRUPT

By vote on Proposition 2½

	Total	Vote on Prop. 2½ Yes	No	Difference: Vote yes minus Vote no
Corruption is common in my state government	87.8%	89.4%	86.0%	+3.4%
Corruption is common in my local government	63.4	63.3	57.8	+5.5

Finally, to determine whether Massachusetts residents believe that taxes can be cut without lowering service levels, we asked whether they agree with the statement, "Proposition 13 in California showed that taxes can be cut without cuts in services." More than eight in ten supporters of Proposition 2½, in contrast to one in three opponents, agree that Proposition 13 demonstrated that this could be done. It appears that many supporters either ignored or were unaware of the fact that California had a large state budget surplus when Proposition 13 passed.

PERCENT AGREEING A LOT OR A LITTLE THAT TAXES CAN

BE CUT WITHOUT SERVICE CUTS

By vote on Proposition 2½

	Total	Vote on Prop. 2½ Yes	No	Difference: Vote yes minus Vote no
Proposition 13 in California showed that taxes can be cut without cuts in services	63.8%	82.4%	34.8%	+47.6%

D. Preferred Method of Financing Services

Do Massachusetts residents want to change the way basic public services are financed? To address this, we asked respondents: "For each service I read, would you like to keep the financing the way it is now or see a greater share of the money come from local property taxes, from state income taxes, from state sales taxes, or a greater share from fees paid by users of the service?" Respondents generally want to continue financing traditional municipal services with property taxes. They show considerable interest however, in shifting the financing of more redistributive services, such as elderly services, to other tax sources. Five general conclusions emerge. (See Table II-3.)

First, Massachusetts residents do not want to eliminate property taxes. Most respondents want to retain the local property tax as the major revenue source for financing traditional municipal services. Between 70 percent and 80 percent of the respondents want to keep financing as it is now or want property taxes to provide a greater share of money for police services, fire fighting services, street and sidewalk repairs, regular garbage pick-up and local public parks and recreation facilities. Thus, in spite of its faults, the property tax is viewed by many as an appropriate way to finance municipal services. This conclusion is reinforced by the fact that 58.9 percent of the sample agree a little or a lot with the statement "The property tax is the best way for cities and towns to raise money for city services."

Second, there is considerable interest in shifting away from reliance on the property tax for education services. More than two out of three people want to reduce the use of property taxes in the financing of special

Table II-3

PREFERRED METHOD OF FINANCING PUBLIC SERVICES[a,b]

By Vote on Proposition 2½

Service Type	Keep Financing the Same	Greater Share of Money Should Come From:				
		Local Property Taxes	State Income Taxes	State Sales Taxes	User Fees	Other Sources
MUNICIPAL SERVICES						
Police	24.4 %	50.7 %	16.6 %	5.2 %	2.2 %	0.9 %
Voted for Proposition 2½	23.6	54.0	13.9	5.6	2.0	0.9
Voted against	27.8	50.8	16.4	3.3	1.2	0.5
Fire Fighting [c]	30.6	51.0	11.6	4.9	1.4	0.5
Voted for Proposition 2½	29.6	57.0	7.4	4.4	0.9	0.7
Voted against	33.9	45.6	15.8	3.5	1.2	0.0
Street & Sidewalk Repairs [c]	30.5	50.8	9.6	6.7	1.8	0.6
Voted for Proposition 2½	30.0	53.9	7.4	6.1	1.3	1.3
Voted against	34.9	49.4	8.1	5.2	2.3	0.1
Regular Garbage Pickup [c]	29.7	41.7	6.4	3.8	17.2	1.2
Voted for Proposition 2½	30.3	40.4	5.3	4.4	18.4	1.2
Voted against	31.1	44.3	5.4	0.6	17.4	1.2
Local Public Parks & Recreation	21.9	49.0	12.2	7.1	8.4	1.4
Voted for Proposition 2½	21.4	49.9	10.5	7.5	9.2	1.5
Voted against	24.5	50.6	13.4	4.7	5.6	1.2
Support of Local Public Transportation	17.3	18.2	23.3	12.4	25.7	3.1
Voted for Proposition 2½	16.6	15.8	20.7	12.6	30.3	4.0
Voted against	17.2	20.2	26.0	11.6	22.4	2.6

(continued)

Table II-3, continued

PREFERRED METHOD OF FINANCING PUBLIC SERVICES[a,b]

By Vote on Proposition 2½

Service Type	Keep Financing the Same	Greater Share of Money Should Come From:				
		Local Property Taxes	State Income Taxes	State Sales Taxes	User Fees	Other Sources
LOCAL SCHOOL-RELATED SERVICES						
Public Elementary and High School Education	20.3%	34.1%	28.4%	8.5%	7.2%	1.5%
Voted for Proposition 2½	19.6	35.4	25.4	8.3	9.9	1.4
Voted against	20.7	36.8	30.4	6.2	4.1	1.8
After School Programs such as Music and Athletics	19.6	39.1	13.3	6.2	20.5	1.3
Voted for Proposition 2½	18.2	39.9	9.1	5.7	25.6	1.5
Voted against	20.7	40.8	15.5	6.0	15.7	1.3
Special Education for Children With Learning Problems	16.9	15.2	48.4	12.1	5.9	1.5
Voted for Propositon 2½	17.1	15.2	46.0	12.6	7.0	2.1
Voted against	18.3	14.6	52.0	10.3	3.7	1.1
Adult Education	19.8	20.3	19.6	6.6	32.4	1.3
Voted for Proposition 2½	19.6	21.4	16.6	6.8	34.2	1.4
Voted against	21.1	21.3	20.1	5.7	30.1	1.7
HUMAN RESOURCES SERVICES						
Mental Health Programs	16.5%	5.4%	57.8%	13.7%	4.8%	1.8%
Voted for Proposition 2½	16.4	5.6	56.5	14.4	5.2	1.9
Voted against	18.2	3.4	60.6	11.9	4.0	1.9
Services for the Elderly[c]	24.3	16.1	42.4	13.1	2.9	1.2
Voted for Proposition 2½	22.3	14.4	39.7	19.2	3.1	1.3
Voted against	28.5	19.2	41.9	8.1	1.7	0.6
State & Community Colleges & Universities	16.5	3.4	46.1	12.0	20.7	1.3
Voted for Proposition 2½	13.6	3.4	44.0	12.3	25.1	1.6
Voted against	20.7	2.2	50.9	10.6	14.2	1.4

Table II-3, continued

PREFERRED METHOD OF FINANCING PUBLIC SERVICES[a,b]

By Vote on Proposition 2½

Service Type	Keep Financing the Same	Greater Share of Money Should Come From:				
		Local Property Taxes	State Income Taxes	State Sales Taxes	User Fees	Other Sources
LEGAL SERVICES						
Courts and Judges[c]	25.5	8.9	43.9	9.7	10.5	1.5
Voted for Proposition 2½	26.4	6.5	44.6	13.0	6.9	2.6
Voted against	28.9	11.4	44.6	5.4	9.0	0.7
PUBLIC ASSISTANCE						
Welfare or Other Public Assistance[c]	21.5	7.8	45.6	13.6	8.0	3.5
Voted for Proposition 2½	17.5	7.2	45.3	17.5	7.2	5.3
Voted against	26.4	10.2	44.3	11.4	6.6	1.1

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[a] Based on the question: "For each service I read, would you like to keep the financing the way it now is or to see a greater share of the money come from local property taxes, from state income taxes, from state sales taxes, or a greater share from fees paid by users of the service?"

[b] Percentages are calculated for respondents who answered each question, and total to 100% across each row.

[c] Asked only of a subsample of respondents.

education services for children with learning problems. This desire for change exists even though respondents undersetimate the extent of current reliance on property taxes. Indeed, although respondents estimate on average that property taxes pay for 42 percent of these expenditures, the actual proportion, as reported by the State Department of Education, is closer to 60 percent.

Less than half the respondents, but still a substantial proportion, also want to alter financing arrangements for the other school-related services included in the survey. Specifically, 45 percent want to decrease the relative reliance on property taxes for overall financing of elementary and secondary education; 49 percent would do so for adult education, as would 41 percent for after-school programs. In the cases of adult education and after-school programs, there is considerable interest in shifting to user charges (32.4% and 20.5% respectively).

Third, at least 40 percent of the respondents want to see state income tax money finance a larger share of human resources services (mental health programs, elderly services and public higher education), courts and judges, and welfare and other public assistance programs. This probably reflects both true interest in seeing such a shift, and some misunderstanding. Respondents generally tend to overestimate the amount of each of these services that is financed by property tax revenues. This is particularly true in the case of legal services and public assistance. Respondents think property taxes finance an average of 36 percent and 39 percent of these services, respectively, when, in fact, almost no contributions are currently made to these services from property taxes.[1]

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[1] Only the subsample of 501 respondents was asked about the proportion of legal services financed by property taxes. See Appendices B and C.

Fourth, supporters and opponents of Proposition 2½ hold similar views about the extent to which property taxes should be used to finance traditional municipal services and local education services. But among those wanting to shift to other revenue sources to finance these services, supporters are more likely than opponents to want to shift to user charges. For example, 30 percent of those who voted "yes" on Proposition 2½ believe a greater share of support for local public transportation should come from users, while only 22.4 percent of the "no" voters hold similar views. "Yes" voters are also more likely than "no" voters to prefer user charges for local public parks and recreation (9.2 percent vs. 5.6 percent); education services (general education, 9.9 percent vs. 4.1 percent; special education, 7.0 vs. 3.7 percent; adult education, 34.2 vs. 30.1 percent and after-school programs, 25.6 percent vs. 15.7 percent), and state and community colleges (25.1 vs. 14.2 percent). The differences between "yes" and "no" voters' preferences for user-charge financing are small for other services.

Finally, among those who want to shift financing responsibility to the state government, state income taxes are overwhelmingly preferred to state sales taxes. Of the 37 percent expressing a prefernce for more state funding of elementary and secondary education, for example, those preferring the use of state income taxes exceed those preferring use of state sales taxes by more than 3 to 1. This pattern holds for other services as well, with the income tax being preferred 4 to 1 for special education, and more than 4 to 1 for mental health programs.

Additional insights into people's feelings about financing arrangements emerge from several attitude questions. The table below shows that both "yes" and "no" voters are concerned about rapidly rising property taxes.

A striking 78 percent of all respondents disagree a lot or a little with the statement "It's OK for property taxes to grow as fast as the cost of living." There are at least two explanations for this attitude. First, even if everyone's pretax income grew as fast as prices, incomes net of federal income taxes would grow more slowly than prices because inflation pushes people into higher tax brackets. As a result, if property taxes increased as fast as prices, after-tax incomes would not grow as fast as property taxes. Second, inflation-induced increases in property taxes can present serious financial problems for households whose incomes do not rise as fast as inflation.

That Massachusetts heads of households want to restrain the rate of growth of property taxes also shows up clearly. More than 77 percent of the respondents believe that state government should give more money to the cities and towns so local property taxes can be kept down. It should be noted, however, that respondents were not asked whether this state money should come from new state taxes or reductions in other state expenditures.

Finally, 58.1 percent of the respondents disagree with the view that taxpayers in wealthy cities and towns should help pay for services in poorer cities and towns. Moreover, supporters of Proposition 2½ disagree more strongly with this view than opponents do. Taken together, this suggests that the desire for more state aid reflects the desire to restrain the growth of property taxes more than the desire to spread the burden of financing local public services more evenly across jurisdictions.

ATTITUDES TOWARD TAXES AND INTERGOVERNMENTAL RELATIONS

	Disagree a lot	Disagree a little	Agree a little	Agree a lot
It's OK for property taxes to rise as fast as the cost of living.	45.7%	32.3%	16.8%	5.2%
Voted for Prop. 2½	50.0	31.4	13.8	4.8
Voted against Prop. 2½	40.3	34.1	19.2	6.4
State government should give more money to the cities & towns so local property taxes can be kept down.	6.8	16.0	40.4	36.8
Voted for Prop. 2½	9.0	15.9	39.1	36.0
Voted against Prop. 2½	5.5	17.5	39.3	37.7
Tax payers in rich cities & towns should help pay for services in poorer cities & towns.	30.0	28.2	28.9	12.9
Voted for Prop. 2½	37.5	27.9	25.4	9.2
Voted against Prop. 2½	23.3	28.7	34.1	13.9

Note: Percentages add to 100 across rows.

Section III

EXPLAINING THE VOTE

In Section I, we discussed people's knowledge of and expectations about Proposition 2½. In Section II we reported what people in Massachusetts want in the way of changes in public services, financing arrangements, and government operations, independent of Proposition 2½. This section combines the two parts to determine why people voted for or against the measure. The discussion is organized around three potential motivations: the desire for a smaller public sector, the desire for tax reform and the desire for changes in the way government operates.

A. Smaller Public Sector

We define the size of the public sector in terms of service levels rather than spending levels. This distinction is important; as discussed above, many of our respondents want to reduce government spending and taxes at the same time that they want to maintain current service levels.

Table III-1 summarizes our findings about people's desires and expectations for a smaller public sector. Since this is the first of a series of similar tables, we will explain in some detail how we constructed the table.

Based on our survey questions, we established criteria to determine whether a respondent shows evidence of desiring or expecting service cutbacks. These criteria are sometimes based on the responses to a single question; in other cases, they refer to responses to a combination of questions.[1]

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[1] The percentages reported in Tables III-1 through III-5 may differ slightly from those reported in earlier tables. The percentages for tables in this section are based on all interviews while percentages in earlier tables are based only on the number of people responding to a particular question. Table entries in this section are based on 1586 total respondents, 721 "yes" voters, and 522 "no" voters.

1. Expect Proposition 2½ to reduce size of public sector: We categorize respondents as expecting Proposition 2½ to reduce the size of the public sector if:
   - they state that service cutbacks are the single most important change OR
   - they indicate that their community services will be cut back (a little or a lot), OR
   - in telling us how much they expect each of the 15 specific services (police, fire, etc.) to be cut back under Proposition 2½, they indicate that, on average, they expect service reductions.

2. Prefer a smaller public sector: We define respondents as preferring a smaller public sector if they want to cut back (a little or a lot) either state or local services, providing that they do not want an offsetting increase in the other type of service.

3. Strongly prefer a smaller public sector: We define respondents as strongly preferring a smaller public sector if they want to cut back (a little or a lot) both locally provided and state-provided public services.

Once the criteria are established, it is a simple matter to determine the number of respondents in each category. In the first column, we report the percentage of total respondents in each of the categories. For example, the table shows that 10.7 percent of the total respondents both strongly prefer and expect Proposition 2½ to lead to a smaller public sector. The second and third columns report the percentages of "yes" and "no" voters in each category. We should note that our definitions are somewhat arbitrary; different criteria, however, yield only slightly different percentages.

Table III-1 reinforces our findings. Most people polled expect Proposition 2½ to require service cutbacks, but only a third of all respondents appear to want a reduced level of public services. To avoid misinterpretation, we emphasize that the criteria we used to determine whether a respondent expects service cutbacks do not distinguish between those who expect small-scale cutbacks in a few services, and those who

Table III-1

SMALLER PUBLIC SECTOR:
PREFERENCES AND EXPECTATIONS[a]
By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½	
		Yes	No
Expect Proposition 2½ to reduce size of public sector	90.0%	88.2%	96.4%
Prefer a smaller public sector	33.7	48.8	20.1
--and expect a smaller public sector	31.4	44.7	19.9
--but do not expect a smaller public sector	2.3	4.1	0.2
Strongly prefer a smaller public sector	11.2	18.7	4.0
--and expect a smaller public sector	10.7	17.8	4.0
--but do not expect a smaller public sector	0.5	0.9	0.0

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[a] See text for definitions of variables.

expect major disruptions. As noted in section I, at least half the respondents do not expect cutbacks in basic services such as police and fire protection and garbage pickup.

Although the vast majority of Massachusetts residents apparently do not want to decrease the size of government, preferences for and expectations of a smaller public sector probably account for some of the favorable vote on Proposition 2½. At the same time, fears of a smaller public sector apparently led many voters to oppose the Proposition.

We base these conclusions on differences between the "yes" and "no" voters. The proportions of "yes" voters (44.7%) who both prefer a smaller public sector and expect Proposition 2½ to lead to that outcome is more than twice the proportion of "no" voters (19.9%) holding the same views. Similarly, the proportion of "yes" voters (17.8%) who strongly prefer a smaller public sector and expect Proposition 2½ to reduce the size of the public sector is more than four times the proportion of comparable "no" voters (4.0%).

We are impressed by the relatively small proportion of "yes" voters who want service cutbacks at both the state and local levels (18.7%). In fact, less than half the "yes" voters want service cutbacks at any level of government. This suggests that the desire for a smaller public sector was neither the only nor the dominant motivation behind the favorable vote on Proposition 2½.

B. Tax Reform

Alternatively, people may have voted for Proposition 2½ to achieve tax reform. We have defined tax reform in two ways -- as a shift away from local property taxes to heavier reliance on state taxes (referred to as specific tax reform) and as a shift away from local property taxes to heavier reliance on other taxes or fees (referred to as general tax reform). The element common to both is reduction in property taxes.

Table III-2 presents the specific tax reform results. Respondents are classified as follows:

1. Expect Proposition 2½ to shift burden to state taxes. Respondents who expect property taxes to fall and who believe that either state sales or income taxes will be increased.
2. Prefer shift to state taxes (education). Respondents who want a greater share of funding for public elementary and high school education to come from state income or sales taxes.
3. Prefer shift to state taxes (for at least one local service). Respondents who want a greater share of funding to come from state income or sales taxes for at least one of the following services: public elementary and high school education, special education, fire, police, support of local public transportation, regular garbage pickup, street and sidewalk repair, public parks and recreation facilities, adult education or after school programs.

The table shows first that "yes" voters are more likely than "no" voters to expect Proposition 2½ to shift the burden to state taxes (65.5% vs. 58.4%). This finding appears to conflict with our earlier statement in Section II-D that "no" voters are more likely than "yes" voters to expect higher income or sales taxes. But the findings can be reconciled by noting that many of the "no" voters do not expect Proposition 2½ to reduce property taxes. In other words, many of the "no" voters expect an increase in state taxes without a shift away from local taxes.

Because education expenditures are such a large portion of local budgets, we singled out preferences for financing elementary and secondary education. Only 33.1 percent of the "yes" voters and 36.2 percent of the "no" voters want to shift to more state financing of public schools. Because "yes" voters are more likely than "no" voters to expect Proposition 2½ to shift tax burdens to the state, however, slightly more "yes" voters than "no" voters (22.6% vs. 18.6%) both want and expect tax reform of this type.

Table III-2

SPECIFIC TAX REFORM--SHIFT BURDEN TO STATE TAXES: PREFERENCES AND EXPECTATIONS

By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½	
		Yes	No
Expect Proposition 2½ to shift burden to state taxes	61.2%	65.5%	58.4%
Prefer shift to state taxes (education)	36.2	33.1	36.2
--and expect shift to state taxes	21.5	22.6	18.6
--but do not expect shift	14.7	10.5	17.6
Prefer shift to state taxes (at least one local service)	86.4	84.3	88.5
--and expect shift to state taxes	53.9	56.3	51.7
--but do not expect shift to state taxes	32.5	28.0	36.8

[a] See text for definitions of variables.

These small differences between "yes" and "no" voters suggest that preferences for and expectations about education finance reform do not add much to our understanding of why Proposition 2½ passed.

To what extent did the desire to change the way any of a number of local public services are financed influence the vote? The percentage of people favoring tax reform increases dramatically when we broaden the definition to include people who want to shift tax burdens to the state for at least one of several local public services. According to this definition, 86.4 percent of all respondents want tax reform. The patterns of preferences and expectations for "yes" and "no" voters, however, is similar to what we found when we looked at preferences for changing education financing. "No" voters are slightly more likely than "yes" voters to prefer a shift to state taxes; because of different expectations about the effects of Proposition 2½, "yes" voters are only slightly more likely than "no" voters to both want and expect tax shifts. Thus, it is difficult to distinguish the "yes" voters from the "no" voters on the basis of this specific tax reform issue.

To further explore the topic of tax reform, we define a set of general tax reform categories -- preferences and expectations for property tax reductions offset by additional taxes and fees.

1. Expect Proposition 2½ to reform tax structure: Those who expect property taxes to fall and who believe that one or more of the following outcomes will occur: state income or sales taxes will be increased; state aid for cities and towns will be increased, or the legislature will be encouraged to reform Massachusetts taxes. Alternatively, respondents could mention tax reform or tax shift as the single most important impact of Proposition 2½.

2. Prefer tax reform: Those who want a greater share of funding to come from state income or sales taxes, charges or other revenues for at least one local public service.

Table III-3

GENERAL TAX REFORM:

PREFERENCES AND EXPECTATIONS[a]

By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½	
		Yes	No
Expect Proposition 2½ to reform tax structure	79.0 %	89.9 %	65.1 %
Prefer tax reform	95.3	95.7	95.0
-- and expect tax reform	75.6	86.1	61.5
-- but do not expect tax reform	19.7	9.6	33.5

[a] See text for definitions of variables.

Most Massachusetts residents want general tax reform (see Table III-3). "Yes" and "no" voters have similar preferences for general tax reform but have different expectations about the effects of Proposition 2½. Eighty-six percent of the "yes" voters prefer and expect general tax reform, while only 61.5 percent of the "no" voters hold similar views. These findings suggest that the interaction of preferences and expectations about general tax reform differentiates "yes" voters from "no" voters and consequently explains some of the support for Proposition 2½.

From a policy perspective, it would be useful to know what voters mean by tax reform. Respondents generally, and "yes" voters in particular, want to reduce property taxes. There is no consensus, however, about alternative revenue sources. Some people want to shift away from property taxes to state taxes. Others want to increase fees on users of servies.

C. Changes in the Way Government Operates

Finally, people may have voted for Proposition 2½ in protest against the inefficiency, corruption, and waste they perceive in Massachusetts government. In section II, we noted the large proportion of Massachusetts heads of households who believe inefficiency and corruption are common at both the state and local levels. In this section we combine these perceptions with voters' expectations about whether Proposition 2½ will induce change.

Tables III-4 and III-5 portray major differences between "yes" and "no" voters in both their perceptions of inefficiency and their expectations about the effects of Proposition 2½. Table III-4 refers to local government inefficiency while Table III-5 refers to inefficiency and corruption at both the state and local level.

Referring first to Table III-4, we define the variables as follows:

1. Expect Proposition 2½ to make local government more efficient. Respondents expect Proposition 2½ to make local government more efficient if they agree a lot or a little with the statement "Proposition 2½ will make local government more efficient."

2. Perceive local inefficiency. We define a perception of local inefficiency by a response of 5 or more percent to the question of how much the respondent believes spending on local public services can be cut back without cutting services.

3. Perceive much local inefficiency. This definition is similar to that of "perceive local inefficiency," except the cutoff is increased to a response of 15 percent.

Table III-4 shows first that "yes" voters are much more likely than "no" voters to expect Proposition 2½ to make local government more efficient. This merely restates findings from Section I. The table also shows that "yes" voters are substantially more likely than "no" voters to believe that local government is inefficient.

Combining expectations and beliefs widens differences between "yes" and "no" voters. While 63.3 percent of the "yes" voters perceive some inefficiency and expect change, only 22.6 percent of the "no" voters hold similar views. In contrast only one in nine "yes" voters (11.0%) compared to almost one in four "no" voters (22.6%) perceives some inefficiency but does not expect change. These findings support the hypothesis that people's perceptions and expectations about the inefficiency of local government played an important role in the overall vote.

Table III-5 presents similar results for a more broadly defined concept of inefficiency and corruption. For this table we categorize respondents as follows:

1. Expect Proposition 2½ to reduce inefficiency and corruption: Respondents who either agree (a lot or a little) with the statement that Proposition 2½ will make local government more efficient or who mention increased efficiency, responsibility or less corruption as the single most important impact of the tax limitation measure.

Table III-4

LOCAL PUBLIC SECTOR INEFFICIENCY:
PERCEPTIONS AND EXPECTATIONS[a]

By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½	
		Yes	No
Expect Proposition 2½ to make local government more efficient	63.4%	82.7%	37.7%
Perceive some local inefficiency	63.7	74.6	46.4
-- and expect change	46.0	63.6	22.6
-- but do not expect change	17.7	11.0	23.8
Perceive much local inefficiency	47.9	57.4	31.8
-- and expect change	34.8	48.5	19.1
-- but do not expect change	13.1	8.9	16.0

---

[a] See text for definitions of variables.

2. Perceive inefficiency and corruption: Respondents perceive inefficiency and corruption if the sum of their stated percentage of possible spending cutbacks for local and state government without service cutbacks is greater than or equal to ten percent and they agree that corruption is common in their local government or state government.

3. Perceive much inefficiency and corruption: Similar to the definition of some inefficiency, except that the cutoff for possible amount of spending cuts is increased to 20 percent.

This table repeats the findings of the previous table on local government inefficiency: "yes" voters are much more likely than "no" voters to perceive general inefficiency and corruption and to expect Proposition 2½ to improve the situation. Regardless of the definition used, over [illegible]0 percent of the "yes" voters -- in contrast to about 30 percent of [illegible] "no" voters -- hold such views. We note again that a substantial portion of "no" voters (39.5 or 33.9 percent) perceive inefficiency and corruption but do not expect Proposition 2½ to improve the situation.

We conclude that Massachusetts voters are very concerned about widespread inefficiency and corruption. The "no" voters are concerned more about waste, inefficiency, and corruption in state government. "Yes" voters typically believe such problems occur in both state and local government. Because "yes" voters are much more likely than "no" voters to believe Proposition 2½ will lead to more efficient government, we conclude that expectations about increased government efficiency explain a large proportion of the vote on Proposition 2½.

Table III-5

INEFFICIENCY AND CORRUPTION: PERCEPTIONS AND EXPECTATIONS[a]

By Vote on Proposition 2½

	Total Respondents	Vote on Proposition 2½ Yes	No
Expect Proposition 2½ to reduce inefficiency and corruption	66.6%	86.7%	40.6%
Perceive some inefficiency and corruption	80.0	86.1	71.1
-- and expect change	55.9	75.3	31.6
-- but do not expect change	21.1	10.8	39.5
Perceive much inefficiency and corruption	73.8	80.4	63.6
-- and expect change	52.5	70.3	29.7
-- but do not expect change	21.3	10.1	33.9

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[a] See text for definitions of variables.

D. Summary

Section III is organized around three main issues -- size of the public sector, financing arrangements, and government operations. In connection with each, two questions arise: To what extent do Massachusetts residents want change? And, to what extent do views about the three issues explain how people voted on Proposition 2½?

We find that most Massachusetts residents do not want to reduce the size of the public sector. Respondents would, however, like to make government more efficient and less corrupt. In addition, they want changes in the way public services are financed. While they agree that lower property taxes would be desirable, they disagree about the best alternative revenue source.

To understand why people voted for or against Proposition 2½, voters' preferences for change must be combined with their expectations about what Proposition 2½ would do. Large differences between "yes" and "no" voters in preferences and expectations on a given issue imply that the issue influenced the voting outcome.

While there is considerable interest in tax reform, "yes" voters are only somewhat more likely than "no" voters to both want and expect tax reform. The small size of the differences suggests that interest in tax reform is not the major issue differentiating the "yes" and "no" voters.

The issue of public sector size differentiates "yes" and "no" voters more clearly. "Yes" voters are more likely than "no" voters to simultaneously want and expect a smaller public sector. The relatively small percentage of "yes" voters wanting service reductions, however, suggests that, while important in differentiating yes and no voters, this is not the major issue motivating the "yes" vote.

The dominant issue appears to be concern about government inefficiency and corruption. Both "yes" and "no" voters want more efficient and responsible government. We find dramatic differences between "yes" and "no" voters on this issue, however, because "yes" voters were much more likely than "no" voters to expect Proposition 2½ to make government more efficient and responsible. This expectation of increased efficiency helps explain "yes" voters' beliefs that Proposition 2½ could provide reductions in taxes and spending without large-scale service reductions.

These findings imply that a major component of the policy response to Proposition 2½ ought to focus on making government more productive. As is now becoming apparent, however, the views held by many of the "yes" voters about the potential for efficiency gains may have been unrealistic. These unrealistic expectations complicate enormously the policy choices that public officials must now make in response to Proposition 2½.

We end by noting that more powerful statistical techniques are needed to completely sort out the different factors influencing the vote on Proposition 2½. For example, many people wanting tax reform may have voted against the Proposition because they feared massive service reductions. By looking at tax reform, service levels and government operation separately, as we have done in this paper, we may have missed some of the interrelations among these three concerns. Elsewhere, however, we have reported results based on a comprehensive multivariate voting model that confirm the basic conclusions of this report.*

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*Helen F. Ladd and Julie Boatright Wilson, "Why Voters Support Tax Limitations: Evidence from Massachusetts' Proposition 2½" in Tax Limitation Study, prepared for the National Institute of Education, 1982.

Appendix A

SAMPLING PLAN

A total of 1,561 interviews were administered to male and female household heads selected by a state-wide stratified random cluster sampling plan.

The sample was drawn as follows. First, each of the 351 Massachusetts cities and towns was grouped into one of 15 cells, based on four property-wealth and four expenditure categories.[1] We consolidated the two cells defined by the highest wealth and the two lowest expenditure levels because of the small proportion of the state's population they represent. We assigned a quota of interviews to each of these 15 cells in proportion to the percentage of the state's population residing in that cell.[2] This assured that interviews would be spread proportionately across communities characterized by the full range of property wealth and expenditure levels.

For a variety of analytical and practical reasons, we clustered our interviews in randomly selected cities and towns rather than spreading them randomly across each cell. Before selecting the clusters, each cell was divided into two or more substrata defined by population size and the percentage of owner-occupied housing. Grouping cities and towns along these four dimensions (per capita property wealth, per capita expenditure, population size and percent of owner-occupied housing) assured that our clusters were selected from groups of relatively homogeneous cities and towns. Interviews were assigned to each substratum approximately in proportion to population. All towns and cities with more than 2500 residents were listed alphabetically by substratum and given one chance to be selected for each 5000 residents.[3] Using a random number table, we selected clusters of 5,000 residents. This procedure allowed larger cities to be randomly selected as cluster points more than one time. In general, 25 interviews were allocated to each cluster point. In some cases, we allocated fewer than 25 in order to obtain a reasonable distribution of interviews across substrata within any given wealth/expenditure stratum.

In each randomly selected city or town, telephone numbers were selected in a two stage process. First, the initial four digits of exchanges currently in use were selected in proportion to their number in the total population of telephone numbers. This screening process minimized the amount of time spent dialing numbers that were not in use. In the second stage a random number process assigned the last three digits to the four-digit stem. As a result, all telephone numbers in use in the jurisdiction, not merely publicly listed numbers, had an equally likely chance of being selected for our sample.

The numbers selected in this manner, called starting points, were given to professional interviewers. If no interview was obtained at the starting point number, the interviewer added 10 to the original telephone number and made another attempt. This process of adding 10 to the telephone number was repeated up to four times until five attempts had been made to obtain an interview based on the starting point number. If no interview was completed after the use of five variations of the original number, another starting point number was drawn.

In the final stage of the sampling process, we selected individual respondents in each household. Interviews were restricted to male and female household heads. We excluded other voting-age household members because the purpose of the study is to focus on the behavior, preferences and orientation of household members most concerned with property tax payments. We divided interview evenly amoung men and women. Male or female respondents were randomly selected after initial contact with the household had been made.

Table A1 shows the fifteen strata, the 58 cities and towns in which interviews were conducted, and the number of interviews we planned to conduct in each of these towns. In a few cases, the actual number of interviews conducted differs slightly from the quotas listed on the table. In one case, the difference is substantial; only 25 of the 55 interviews planned for Salem were conducted. In the analysis, each Salem respondent was given a weight of two. As a result, the percentages presented in this report are based on 1,586 rather than 1,561 respondents.

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[1] The categories were developed by the Massachusetts Taxpayers' Foundation for simulations of the effects of alternative tax limitation measures. The percapita wealth and expenditures are based on 1976 population figures.

[2] We would have preferred to allocate interviews among strata in proportion to the number of resident households rather than in proportion to population, but 1980 Census data on households were not available.

[3] Because the census does not gather data on the social and economic characteristics of small towns, additional information to supplement that gathered in the personal interview is not available. These small towns comprise only 1.7 percent of the state's population.

Table A-1
STRATIFIED RANDOM CLUSTER SAMPLE—
QUOTA OF INTERVIEWS IN EACH RANDOMLY SELECTED TOWN/CITY[a]
By Per Capita Expenditure and Per Capita Wealth Categories

	Per Capita Wealth							
	I(less than $10,771)		II($10,771-$13,906)		III$13,906-$18,160)		IV(more than $18,160)	
er Capita Expenditure	CITY/Town	# of Interviews	CITY/Town	# of Interviews	CITY/Town	# of Interviews	CITY/Town	# of Interviews
(less than $625)	Clinton	25	Swansea	25	Groton	20	Yarmouth	25
	Dudley	25						
	Halifax	25						
	LEOMINSTER	25						
I ($625-$717)	Bellingham	20	Pembroke	25	Dartmouth	25		
	FALL RIVER	25	Westfield	25	Westport	25		
	Greenfield	20	W.Springfield	25				
	HOLYOKE	25						
	Lawrence	25						
	MALDEN	50						
	MEDFORD	25						
	NEW BEDFORD	25						
	NORTHAMPTON	20						
	Oxford	20						
II ($717-$838)	BROCKTON	25	Arlington	25	Dedham	25	Lincoln	20
	MELROSE	25	ATTLEBORO	25	E.Longmeadow	25	Lynnfield	10
	REVERE	25	BEVERLY	25	Waltham	25		
	SPRINGFIELD	50	Framingham	25				
			Randolph	25				
			Tewksbury	25				
			Wakefield	25				
V (more than $838)	BOSTON	150	PEABODY	25	Braintree	25	Andover	25
	CAMBRIDGE	25	QUINCY	25	Brookline	15	EVERETT	10
	CHELSEA	15	SALEM	55	NEWTON	30	Needham	25
	HAVERILL	20			Sharon	25	Orleans	25
	LYNN	21			Walpole	25	Provincetown	20
	WORCESTER	42					Somerset	25

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a. In a few cases, the actual number of interviews differs slightly from the quotas listed in the table. In one case, however, the difference is substantial. Only 25 of the 55 interviews planned for Salem were conducted.

Appendix B

QUESTIONNAIRE AND INTERVIEWING

The questionnaire on which this report is based includes questions in each of the following areas:

I. PROPOSITION 2½

- A. How did respondents vote on Proposition 2½? If Proposition 2½ had been a constitutional amendment, would they have voted differently? How would non-voters have voted? How did respondents vote on Question 3?
- B. Anticipated effects of Proposition 2½? What did respondents think the overall effect of Proposition 2½ would be on taxes, governmental efficiency and state aid? How would it affect certain specific services such as police and education? How would it affect the taxes paid and services used by the respondent's household?
- C. Knowledge of Proposition 2½? What did respondents know about the provisions of Proposition 2½?

II. PUBLIC SERVICES

- A. Perception of the overall level of public services. How do respondents think their public services compare with those provided in other towns, in other neighborhoods in the same jurisdiction, and in their jurisdiction two years ago?
- B. Desired public service levels. Compared to the level of state and local public services currently provided, what level would respondents prefer--both for services in general and for a number of specific services?

III. FINANCE ISSUES

- A. Perceptions of costs. How aware is respondent of direct and indirect property tax burdens?
- B. Awareness of current financing arrangements. What proportion of the costs of a variety of services does respondent think are financed by property taxes?
- C. Desired financing arrangements. Do respondents desire changes in the method of financing various public services? For each specific service, would they prefer increases in the proportion financed by user charges or state income or sales taxes?
- D. Desired tax and spending levels. What percentage changes do respondents desire in total taxing and spending levels for overall state, municipal and school services?

IV. EFFICIENCY IN PUBLIC SERVICE DELIVERY

A. Perception of inefficiency. To what extent does respondent perceive state and local government to be inefficient and corrupt?

B. Amount of inefficiency. How much does respondent think services in general and certain specific services could be cut back without significantly affecting the quality and quantity of the services provided?

V. BENEFICIARIES OF PUBLIC SERVICES

A. Service usage. Which public services does respondent's household use?

B. Perception of other beneficiaries. To what extent does respondent think that members of certain groups currently receive their fair share of public services for the taxes they pay? Do certain groups benefit more now than they did in the past?

VI. ATTITUDES TOWARD GOVERNMENT AND TAXES

A. Attitudes toward taxes and finance arrangements. What is respondent's attitude toward various forms of taxes and service finance arrangements?

B. Perception of appropriate government role. What does respondent think the appropriate role of government is in a free enterprise economy? How much should citizens expect from their government?

VII. RESPONDENT CHARACTERISTICS

A. Demographic characteristics. What is respondent's educational level, occupation, family composition, income, race and religion?

B. Perception of financial well-being. Are respondents better off now than they were in the past? Do they expect to be better off in the future?

C. Housing characteristics. What kind of housing does respondent live in? What are the market and assessed values of owner-occupied housing and how much rent is paid for rental housing?

The interviewing was conducted for us by Lieberman Research Suburban, Inc. A pretest the weekend before the election indicated that respondents understood and could answer all questions but that the survey took an average of 51 minutes to complete. As a result, we eliminated or rewrote a number of questions.

Lieberman Research, Inc., began the final interviewing on Thursday, November 6. After approximately 500 interviews were completed, we discovered that the questionnaire was still too long, taking approximately 45 minutes to complete. Hence, we eliminated additional questions while the interviewing was in progress. The final shortened questionnaire took approximately 30 minutes to complete. All interviews were administered within approximately two weeks of the election.

Appendix C

DEMOGRAPHIC CHARACTERISTICS OF SAMPLE AND SUBSAMPLE

Most findings presented in this report are based on data from the total number of respondents interviewed. Some findings, however, are based on data from a subsample of respondents. The first 501 respondents interviewed make up the subsample. As explained in Appendix B, after these 501 respondents were interviewed, we discovered that our interview was taking too long to administer. We eliminated several questions to save time. Consequently some information obtained from this subsample of 501 respondents was not obtained from those interviewed later.

	Total Respondents (1,586)	Subsample (501)
Vote On Proposition 2½		
Yes	45.5%	45.3%
No	32.9	33.2
Didn't vote	21.6	21.5
Sex[1]		
Male	49.7	44.2
Female	50.3	55.8
Age		
16-24 years	9.8	8.8
25-44 years	49.8	51.2
45-64 years	29.7	29.6
65 and over	9.7	8.2
No answer	1.0	2.1
Average age	41.8 years	41.8 years
Education		
Less than high school degree	11.2	11.9
High school degree (including trade school)	33.0	33.6
Some college	20.6	21.1
College graduate or more	31.7	29.5
No answer	3.5	3.8
Occupation[2]		
Manager, professional, technical	50.9	51.8
Clerical and sales	21.8	22.8
Blue collar	15.6	14.1
Service	10.4	10.3
Farming	0.6	0.4
No answer	0.7	0.7

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[1] A quota of half males and half females was purposely set for this study.

[2] Includes last occupation of respondents who are retired or not working.

Appendix C (Continued)

DEMOGRAPHIC CHARACTERISTICS OF SAMPLE

	Total Respondents (1,586)	Subsample (501)
Government Worker		
Public schools	6.1%	6.7%
Town/city government	7.6	7.3
State/county government	3.6	4.1
Federal government	4.1	2.9
Not a government worker	78.6	79.0
Income		
$10,000 or less	11.2	9.4
$10,001 to $20,000	23.3	24.0
$20,001 to $30,000	19.3	21.7
$30,001 or more	15.0	15.0
Refused	31.2	29.9
Average income	$24,115	$24,550
Marital Status		
Single	16.7	13.4
Married	66.6	68.2
Widowed, divorced or separated	15.4	16.5
Other	1.3	1.9
Number in Household	3.1	3.2
Race		
White	94.0	94.1
Black	2.6	2.3
Hispanic	2.3	1.7
Other	1.1	1.9
Religion		
Catholic	49.2	47.0
Protestant	28.6	31.7
Jewish	5.8	5.6
Other	6.9	7.5
No preference	9.5	8.2
Tenure		
Own	62.7	66.2
Rent	34.8	30.9
Other	1.7	1.9
Refused	0.8	1.0
Current Market Value (Owners Only)	$64,518	$63,575
Assessed Value (Owners Only)	$38,616	$39,869
Last Year's Property Taxes (Owners Only)	$ 2,158	$ 1,836
Monthly Rent (Renters Only)	$ 324	$ 324

Appendix C (Continued)

DEMONGRAPHIC CHARACTERISTICS OF SAMPLE

	Total Respondents (1,586)	Subsample (501)
Number of Years Lived in Massachusetts	33.4	34.5
Number of Years Lived in City/Town	19.7	19.8
Municipality Type		
Boston	9.7%	1.7%
Cities other than Boston	40.2	38.4
Towns	50.1	59.9
Services Household Uses Regularly		
Adult education	20.7	21.9
Special education	8.3	9.8
State and community colleges and universities	21.8	21.7
Local public transportation	41.0	34.9
Local public parks and recreation facilities	59.6	59.9
Mental health programs	5.0	4.4
Welfare or other public assistance programs	7.9	7.3
Services for the elderly	4.7	4.8
After school programs	18.9	22.3
Public school	32.7	35.7

PROPOSITION 2½: VARIATIONS IN INDIVIDUAL PREFERENCES AND EXPECTATIONS ACROSS COMMUNITIES

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PROPOSITION 2 1/2: VARIATIONS IN INDIVIDUAL PREFERENCES AND EXPECTATIONS ACROSS COMMUNITIES

Massachusetts voters overwhelmingly supported a stringent tax limitation measure in November 1980. Commonly known as Proposition 2 1/2, the measure requires high tax rate communities to reduce property tax levies fifteen percent per year until the tax rate is reduced to the maximum allowable rate of 2 1/2 percent of full and fair market value. Low tax rate communities may increase property tax levies but by no more than 2 1/2 percent per year.

A state wide telephone survey of 1561 Massachusetts residents administered during the two weeks immediately following the vote shows that supporters and opponents of Proposition 2 1/2 had very different expectations about what the proposition would accomplish. Supporters were more likely than opponents to expect Proposition 2 1/2 to result in lower taxes and more efficient, reponsible government and were less likely to expect service cutbacks. In addition, the survey results indicate that supporters were more likely than opponents to desire lower levels of public services and spending and to perceive widespread inefficiency and corruption in local government. (See Ladd and Wilson, 1981.)

This paper extends the earlier analysis of the survey data by addressing the question of whether individuals' expectations and preferences vary in a systematic way across communities grouped by 1981 effective tax rates. Section I describes and justifies the community groupings. Sections II and III examine how respondents' expections of the effects of Proposition 2 1/2 and their preferences for fiscal change vary across community groups.

I. COMMUNITY GROUPS

The basic sample consists of 1561 Massachusetts heads of households, evenly divided between men and women, randomly selected from 58 cities and towns. The sampling design assures that the 58 communities are representative of all communities throughout the state in terms of per capita property wealth, per capita expenditures, population and percent of owner-occupied housing.[1] The basic sample is supplemented by interviews with an additional 94 randomly selected household heads in Boston. Combining the 154 respondents from Boston in the basic sample with the 94 from the oversample yields a sample large enough for separate analysis of the views of Boston residents. This is desirable because of Boston's large size, its special fiscal problems and its high tax rate.[2] Respondents from other cities and towns have been grouped into three categories defined by the estimated 1981 full value tax rate in the respondent's community.[3] These tax rate categories are defined as follows:

Low tax rate -- towns and cities with tax rates less than 2.5 percent;

Moderate tax rate -- towns and cities with tax rates between 2.5 and 3.9 percent;

High tax rate -- towns and cities with tax rates greater than or equal to 4 percent (except Boston).

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[1] See Appendices A, B, and C of Helen F. Ladd and Julie Boatright Wilson, "Proposition 2 1/2: Explaining the Vote," for a description of the sampling plan and survey methodology. Because of an interviewing error, only 25 of the 55 interviews for the city of Salem were conducted. Hence, throughout the analysis each Salem respondent is given a weight of two.

[2] According to the Massachusetts Department of Revenue, Boston's 1981 full value tax rate is 9.9 percent. This is probably a substantial overestimate, however. A 1974 study by D. Holland and O. Oldman determined that the full value rate was about 6.6 percent. This is still high relative to most other cities in this state.

[3] 1981 full value tax rates are based on Massachusetts Department of Revenue estimates of the market value of taxable property in each community. For a number of reasons, the tax rate estimates probably overstate true effective tax rates, especially in the larger cities and towns.

These groups are defined to highlight differing expectations that reflect relevant differences in the objective characteristics of the respondent's community. The low tax rate communities face no first year property tax reduction but must limit the annual growth of property tax levies to 2 1/2 percent; the moderate rate communities face up to 15 percent reductions in the first year and in some cases reductions in subsequent years as well; and the high tax rate communities all face more than one year of property tax reductions.[1] Further subdivision of these groups by community service levels, the homogeneity of the population or by type of government (i.e., town meeting or mayor-city council form) would be desirable to differentiate the extent of satisfaction with current service levels and perceptions of governmental inefficiency and corruption across communities. These subdivisions are ruled out, however, because the resulting sample sizes would be too small for accurate statistical comparison of differences across groups.

The number of sample communities and total respondents in each tax rate category are as follows:

Community Group	Sample Size	Number of communities in survey
Boston	248	1
High tax rate	615	22
Moderate tax rate	620	26
Low tax rate	197	9
	1680*	58

*The basic sample of 1561 with Salem respondents weighted twice makes 1586, plus 94 additional respondents from the Boston oversample yields 1680 total respondents.

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[1] Because the 1981 estimated full value tax rates probably overestimate actual tax rates, they cannot be used to make precise statements of the revenue reductions required by Proposition 2 1/2. In addition, all communities lose 62 percent of their motor vehicle excise revenues because Proposition 2 1/2 reduces the statewide uniform rate from 6.6 to 2 1/2 percent. In 1981, local revenues from this source accounted for about 6.5 percent of total local tax revenues. For a discussion of Proposition 2 1/2's first year revenue impacts, see K.L. Bradbury, H.F. Ladd, and C. Christopherson, "Proposition 2 1/2: Initial Impacts."

Because the estimated standard error of a difference in proportions depends on the two sample proportions and on the two sample sizes, no simple statement can be made about the magnitude of the difference needed for statistical significance. A rough guide for the results reported below would be that differences of eight to ten percentage points between any two groups are statistically significant. (See Appendix A for table of statistically significant differences.)

The following table shows the actual vote on Proposition 2 1/2 and the proportion of voters in our sample saying they voted "yes" on Proposition 2 1/2 by community group.

SUPPORT FOR PROPOSITION 2 1/2
(Among those who voted on Proposition 2 1/2)
By Tax Rate

	Percent Supporting Proposition 2 1/2	
Community Groups	Actual[a]	Sample[b]
Total	57.9	57.7
Boston	57.4	52.2
High tax rate	57.6	58.6
Moderate tax rate	59.4	59.2
Low tax rate	53.2	53.8

[a] Proportion of yes votes on Proposition 2 1/2 in Massachusetts communities included in each category of our sample.

[b] Proportion of voting respondents who report voting yes on Proposition 2 1/2.

A majority of voters in each group supported the Proposition, with support being somewhat weaker in communities with low tax rates than in other communities. In comparing the sample proportions to the actual proportions, it should be noted that we sampled households, not voters. This distinction is particularly relevant for Boston which has a larger proportion of single adult households than other communities in the state. Because survey results indicate that adults in single-adult households were more likely to vote "no" than respondents in multiple-adult households, this distinction partially explains the discrepancy between the 52.2 percent of the Boston sample that said they voted "yes" and the 57.4 percent actual vote.

II. EXPECTED EFFECTS OF PROPOSITION 2 1/2

Because of major differences across the four community groups in the magnitude of local revenue losses required by Proposition 2 1/2, respondents' expectations about the measure's impact on local government activities are likely to differ systematically across these groups. We did not expect to observe systematic differences across these groups in expectations about the proposition's impact on state government activities, however. Predictions about expected impacts on overall household welfare are muddied by the possibility that the gains from local tax reductions may be offset by service reductions or higher state taxes.

Local Public Services

As Table I indicates, respondents living in high tax rate communities were more likely than those living in low tax rate communities to expect Proposition 2 1/2 to lead to reductions in the overall quantity of public services provided by their local governments. The proportion of respondents expecting service cuts ranges from 60 percent in towns with low tax rates to 76 percent in Boston.

Surprisingly, however, expectations about the impact of Proposition 2 1/2 on specific services provided by local governments exhibit little variation across groups. Only the expectations of Boston respondents stand out.

- Respondents in high, moderate and low tax-rate communities were equally likely to expect Proposition 2 1/2 to lead to cuts in each local service measured.
- Boston residents were more likely than others to expect Proposition 2 1/2 to lead to cuts in many specific local services. With respect to police and fire services, however, Boston residents were no more likely than others to expect service reductions.

Table I

PERCENTAGE OF RESPONDENTS EXPECTING SERVICE CUTBACKS BECAUSE OF PROPOSITION 2 1/2[a,b]

By Tax Rate

Service Type	Total Respondents[c]	Property Tax Rate per $1,000 of Estimated Market Value: Boston	$40 or more	$25 to $39	Less than $25
Municipal Services					
Police	43.3%	43.9%	43.0%	44.7%	42.4%
Fire fighting	40.7	43.9	41.3	40.4	37.4
Street and sidewalk repairs	57.2	67.9	57.8	56.8	48.9
Regular garbage pickup	39.6	45.9	36.5	42.7	36.3
Local public parks and recreation	61.5	73.7	60.2	61.9	56.0
Support of local public transportation	54.1	59.1	55.4	53.7	49.4
Local School-related Services					
Public elementary and high school education	56.4	61.6	55.2	57.2	54.0
After school programs	71.4	77.4	70.9	71.7	68.2
Special education	49.9	57.2	51.2	46.9	51.1
Adult education	63.9	74.3	66.7	64.7	66.8
Human Resources Services					
Mental health programs	49.0	61.5	48.5	46.9	49.5
Services for the elderly	48.7	57.2	50.1	45.5	50.8
State and community colleges and universities	54.4	62.4	53.2	53.4	58.5
Legal Services					
Courts and Judges	31.7	38.3	30.5	29.9	32.1

Table I, continued

PERCENTAGE OF RESPONDENTS EXPECTING SERVICE CUTBACKS BECAUSE OF PROPOSITION 2 1/2[a,b]

By Tax Rate

Service Type	Total Respondents	Property Tax Rate per $1,000 of Estimated Market Value: Boston	$40 or more	$25 to $39	Less than $25
Public Assistance					
Welfare or other public assistance	62.9%	65.4%	62.3 %	63.9 %	59.9%
Local Services	69.3	76.4	71.0	68.7	59.6
Services my Household Uses	47.8	54.7	49.3	46.8	38.9

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[a] Based on the questions:

"Now that Proposition 2 1/2 has passed, what do you think will happen to services I read. Using the first list of phrases tell me whether you think there will be a lot less, a little less, the same, a little more or a lot more ("X'd ITEM) services now that Proposition 2 1/2 has passed?"

"Overall, how do you think the passage of Proposition 2 1/2 will affect your community--do you think the services your local government offers will be cut back a lot, cut back a little, remain the same, increase a little or increase a lot?"

"How about you and members of your household? Now that Proposition 2 1/2 has passed, do you think the public services your household uses will be cut back a lot, cut back a little, remain the same, increase a little, or increase a lot?"

[b] Each entry is the percentage of respondents who think there will be a lot less or a little less of that particular service or who think that community or household services will be cut back a lot or cut back a little. Percentages are based on those responding to the question.

[c] Total does not include Boston oversample.

Other Public Services

There are almost no differences across the three non-Boston groups in terms of respondents' expectations about the impact of Proposition 2 1/2 on human resources services, legal services and public assistance. This reflects the fact that primary responsibility for providing and financing all three rests with the state. We emphasize that expectations of service cuts at the state level are not irrational. As shown below, many respondents expected the state government to bear part of the burden of property tax reduction by providing new state aid to local governments.

Respondents from Boston were generally more pessimistic than other respondents about the impact of Proposition 2 1/2 on human resources and legal services. In the case of human resources services, the explanation may be that Boston provides some of these services locally.

Changes in Government Operations

Boston respondents were significantly less likely than other respondents to expect Proposition 2 1/2 to lead to more efficient government and more local control over school spending. Despite this difference, Table II shows that more than half the Boston respondents expected these outcomes. Respondents in communities with moderate tax rates were most likely to expect more voter control over school spending. This pattern of expectations for increased efficiency and control helps account for the similarity in expectations of cuts in specific services across the three non-Boston groups.

Tax Reform and Local-State Relations

Most respondents expected the passage of Proposition 2 1/2 to encourage the legislature to reform taxes, but respondents from low tax rate communities were slightly less likely than other respondents to expect this outcome.

Table II

PERCEIVED EFFECTS OF PROPOSITION 2 1/2[a,b]

By Tax Rate

Proposition 2 1/2 will:	Total Respondents[c]	Property Tax Rate per $1,000 of Estimated Market Value: Boston	$40 or more	$25 to $39	Less than $25
Lower property taxes in Mass.	82.1%	85.8%	80.5%	85.9%	72.0%
Encourage state legislature to reform taxes	81.1	81.6	80.7	83.6	75.5
Increase Mass. state income taxes	60.8	65.0	57.6	63.6	62.1
Increase state sales tax	67.5	75.5	66.0	68.2	67.5
Increase state aid to cities and towns	48.7	49.2	50.4	48.6	47.1
Give state government more control over local matters	45.8	48.7	49.3	43.4	43.5
Make local government more efficient	65.2	55.7	67.4	67.2	61.3
Give local voters more control over school spending	70.8	62.5	70.7	73.7	67.2
Decrease funds for local public schools	69.2	78.8	66.0	71.9	64.0
Lower rents	39.5	36.2	40.3	40.3	34.2
Attract more business & industry to Massachusetts	73.6	73.3	74.3	74.0	63.4

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[a] Based on the question: "Next, I will read a list of some of the effects that the passage of Proposition 2 1/2 might have in Massachusetts. To what extent do you agree or disagree that Proposition 2 1/2 will__________? Do you agree a lot, agree a little, disagree a little, or disagree a lot?"

[b] Each entry is the percentage of respondents who agree "a lot" or "a little" that the particular outcome will occur. Percentages are based on those responding to the question.

[c] Total does not include Boston oversample.

There were few differences across groups in respondent expectations of increased state aid to municipalities. In each group, close to half the respondents expected increases. Respondents in high tax rate communities, including Boston, were slightly more likely than others to expect Proposition 2 1/2 to give the state government more control over local matters.

Most Important Changes Resulting From Proposition 2 1/2

Respondents in each group reported that lower taxes, followed by service cutbacks and greater government efficiency were the most important effects expected to result from Proposition 2 1/2 (see Table III). Boston residents were more likely than others to report that the most important effect would be that Proposition 2 1/2 would not work or would cause problems, and respondents in low tax rate towns were more likely than others to report that the most important effect would be a shift in taxes away from property taxes.

Services Used by Respondent's Household

The higher the tax rate in the respondent's community, the more likely the respondent was to expect Proposition 2 1/2 to lead to cuts in services used by its household. Slightly less than 40 percent of respondents in low tax rate towns compared to 55 percent of Boston residents expected the tax limitation measure to affect household services directly (see Table I).

Taxes Paid by Respondent's Household

Table IV indicates that respondents in low tax rate towns were significantly less likely to expect lower household taxes and significantly more likely to expect higher household taxes because of Proposition 2 1/2 than respondents from higher tax rate communities. The difference reflects both the smaller reduction of local taxes in low tax rate communities and the fact that respondents in low tax rate towns were just as likely as respondents in other communities to expect Proposition 2 1/2 to lead to increased state sales and income taxes.

Table III

PERCEPTIONS OF MOST IMPORTANT IMPACT OF PROPOSITION 2½[a]

By Tax Rate

	Total Respondents[b]	Property Tax Rate per $1,000 of Estimated Market Value: Boston	$40 or more	$25 to $39	Less than $25
Lower taxes	28.6%	25.4%	30.7%	29.0%	24.4%
More efficiency & responsibility, less corruption	20.2	22.6	17.9	22.3	19.8
Cutback services	24.3	28.2	22.9	26.1	22.8
Send a message	11.0	8.5	10.1	12.1	10.7
Tax reform	6.3	9.7	6.2	5.3	7.1
Tax shift	6.4	3.9	6.3	5.0	13.2
Unemployment of government workers	4.1	2.4	4.1	4.4	4.1
Government will spend less	6.3	8.5	6.7	6.6	3.6
More investment in state	2.2	3.2	2.6	1.6	2.0
Less power for school committees	3.3	1.6	3.2	4.4	1.5
Less control at local level	0.9	0.8	0.5	1.0	1.5
Won't work, cause problems	11.2	16.5	11.2	9.7	11.2
TOTAL	124.2	129.5	122.4	127.5	122.4
Average number of responses per person	1.2	1.3	1.2	1.3	1.2

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[a] Based on the question: "Overall, what do you think will be the single most important change caused by the passage of Proposition 2½?"

[b] Total does not include Boston oversample.

Table IV

EFFECTS OF PROPOSITION 2 1/2 ON HOUSEHOLD TAXES[a]

By Tax Rate

Now that Proposition 2 1/2 has passed, my household taxes will be:	Total Respondents[b]	Property Tax Rate per $1000 of Estimated Market Value:			
		Boston	$40 or more	$25 to $39	Less than $25
Less	49.4%	48.7%	50.7%	53.4%	33.3%
Lot less	10.2	10.5	11.9	9.8	5.7
Little less	39.2	38.2	38.8	43.6	27.6
Same	30.7	30.3	29.6	29.7	36.5
More	19.9	21.0	19.7	16.9	30.2
Little more	14.9	17.2	14.4	12.8	22.4
Lot more	5.0	3.8	5.3	4.1	7.8

---

[a] Based on the question: "How about the amount of taxes your household pays--now that Proposition 2 1/2 has passed, do you think your household will be paying a lot less in taxes, a little less, about the same amount, a little more, or a lot more in taxes?"

[b] Total does not include Boston oversample.

Overall Effect on Household

The surprising finding in Table V is that less than 40 percent of the respondents in each group expected Proposition 2 1/2 to make their household better off. This suggests that household welfare was not the only factor motivating the vote. At the same time, we note that the pattern of responses across groups is similar to the pattern of voting outcomes based on our sample data. In particular, the two groups--Boston and the low tax rate towns--that were least likely to expect improved household welfare also provided the least support for Proposition 2 1/2.

Summary

In general, these findings confirm our prediction that expectations about the proposition's impact on local government but not on state activities would vary with the local property tax rate. At the same time, some of the differences across groups are relatively small; of particular interest is the finding that the expectations of non-Boston respondents about possible cuts in specific local service showed almost no variation across community groups.

III. DESIRED CHANGES IN SERVICE LEVELS, TAXES AND GOVERNMENT OPERATIONS

We have no firm theoretical basis for predicting how desired changes in service levels, taxes and government operations are likely to vary across communities grouped by tax rate. To the extent that high tax rates reflect taxpayer-voter demands for high public service levels, for example, residents of communities with high tax rates should be no more likely to want lower spending or service levels than residents in other communities. On the other hand, several arguments can be suggested for why respondents in high tax rate communities might be less satisfied with their fiscal situations than those in low tax rate communities. The former may interpret high tax rates, either correctly or incorrectly, as a sign that spending is excessive or that their local government is inefficient. In addition, to the extent that high tax rates reflect high spending on needy segments of the

Table V

OVERALL EFFECTS OF PROPOSITION 2 1/2 ON HOUSEHOLD [a]
By Tax Rate

	Total Respondents[b]	Property Tax Rate per $1000 of Estimated Market Value:			
		Boston	$40 or more	$25 to $39	Less than $25
Now that Proposition 2 1/2 has passed, overall my household will be:					
Better off	37.2%	33.1%	39.4%	38.2%	30.6%
Lot better off	8.5	8.7	10.0	9.3	3.1
Little better off	28.7	24.4	29.4	28.9	26.5
Same	38.8	40.1	37.6	38.4	43.9
Worse off	23.9	26.9	23.0	23.4	26.6
Little worse off	17.1	21.9	16.6	15.8	18.9
Lot worse off	6.8	5.0	6.4	7.6	7.7

---

[a] Based on the question: "Overall, will your household be a lot worse off, a little worse off, about the same, a little better off, or a lot better off now that Proposition 2 1/2 has passed?"

[b] Total does not include Boston oversample.

population, non-needy residents might perceive unfair burdens on themselves. Finally, if high tax rates reflect small tax bases rather than high spending, residents in cities and towns with high tax rates may be more likely than others to prefer service increases and to prefer a shift away from local property taxes to state income or sales taxes.[1]

Preferred Level of Local Services

Respondents from Boston and the high tax rate communities were more likely than others to express preferences for higher levels of overall local services. In Table VI, the same pattern emerges with respect to preferred changes in the level of specific local services:

- Boston residents were much more interested than others in increasing police services. Nearly six in ten (59%) Boston residents wanted to increase police services, a proportion twice as high as that in low and moderate tax communities.
- Although respondents in Boston and other high tax rate communities were more likely than others to want higher local services in general, residents in low tax rate towns were equally as likely as those in high tax communities to want higher levels of garbage pickup, park and recreation services, support for local public transportation and adult education.
- Boston residents are significantly more likely than others to want higher levels of public elementary and high school education.

Preferred Level of State Services

Preferences for changes in overall state services show little variation across community groups. Similarly, preferences for many of the specific services financed primarily by the state exhibit little variation across groups. Only in the case of elderly services were residents in Boston and other high tax rate communities significantly more likely than others to prefer increases.

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[1] See Bradbury, Ladd and Christopherson for evidence that actual differences in tax rates across Massachusetts communities reflect base differences more than spending differences.

Table VI

AMOUNT OF SERVICES PREFERRED[a,b]

By Tax Rate[c]

	Cut back a lot	Cut back a little	Keep the same	Increase a little	Increase a lot
MUNICIPAL SERVICES					
Police	3.3%	7.6%	55.1%	21.0%	13.1%
Boston	1.6	5.3	34.1	30.5	28.5
$40 or more	3.8	6.4	53.7	22.8	13.3
$25 to $39	3.2	9.7	59.3	18.0	9.7
Less than $25	2.5	5.1	62.4	18.8	11.2
Fire	2.5	6.5	71.1	12.7	7.2
Boston	0.8	4.1	69.1	15.9	10.2
$40 or more	2.6	6.1	69.1	14.6	7.6
$25 to $39	2.8	8.7	72.3	10.3	5.9
Less than $25	2.1	3.1	75.1	10.4	9.3
Street Repairs	3.9	6.1	70.1	22.9	17.0
Boston	1.6	6.1	43.1	26.8	22.4
$40 or more	4.3	5.8	45.0	25.2	19.6
$25 to $39	4.4	7.6	54.2	20.8	13.0
Less than $25	2.7	4.3	57.3	20.0	15.7
Garbage Pickup	5.3	7.6	73.1	8.2	5.8
Boston	1.3	9.7	69.7	9.2	10.1
$40 or more	4.8	6.1	75.7	9.2	4.2
$25 to $39	7.0	7.8	73.0	7.4	4.8
Less than $25	5.3	9.9	64.9	9.2	10.7
Parks and Recreation	3.6	10.2	53.1	21.4	11.7
Boston	4.1	11.2	52.9	20.2	11.6
$40 or more	3.5	9.5	51.9	23.6	11.5
$25 to $39	3.8	11.4	53.8	20.0	11.1
Less than $25	4.3	8.6	53.5	18.9	14.6
Local Public Transportation	11.9	9.8	28.9	23.3	26.0
Boston	12.3	10.3	20.6	21.8	35.0
$40 or more	13.6	10.5	32.0	20.7	23.2
$25 to $39	11.8	8.8	28.2	26.2	25.0
Less than $25	6.0	7.3	27.8	27.2	31.8

(continued)

Table VI continued

AMOUNT OF SERVICES PREFERRED[a,b]

By Tax Rate[c]

	Cut back a lot	Cut back a little	Keep the same	Increase a little	Increase a lot
LOCAL SCHOOL-RELATED SERVICES					
Public Elementary and High School Education	4.1%	13.0%	44.3%	22.3%	16.3%
Boston	4.8	10.4	33.0	24.3	27.4
$40 or more	4.6	13.2	41.6	24.1	16.4
$25 to $39	4.1	13.7	46.5	21.3	14.4
Less than $25	2.1	11.5	52.4	20.4	13.6
After School Programs	7.6	15.2	46.2	16.7	14.3
Boston	8.1	13.1	39.0	21.2	18.6
$40 or more	7.2	13.3	43.8	18.3	17.3
$25 to $39	8.5	17.1	49.5	13.9	11.0
Less than $25	5.8	17.5	45.0	21.2	10.6
Special Education	3.5	7.6	34.0	27.3	27.6
Boston	3.8	6.0	29.4	27.7	33.2
$40 or more	4.0	6.4	31.3	28.8	29.6
$25 to $39	3.3	8.0	37.2	26.7	24.8
Less than $25	2.6	12.0	36.1	23.0	26.2
Adult Education	6.4	11.6	54.4	18.1	9.4
Boston	5.0	15.1	49.4	17.6	13.0
$40 or more	7.3	9.5	52.8	19.5	11.0
$25 to $39	6.6	13.6	57.0	15.6	7.1
Less than $25	3.7	10.0	55.3	21.6	9.5
HUMAN RESOURCES SERVICES					
Mental Health Programs	3.7	5.8	40.4	28.0	22.1
Boston	4.3	7.4	36.5	27.0	24.8
$40 or more	4.5	7.0	36.8	28.2	23.6
$25 to $39	2.8	4.8	43.6	28.1	20.8
Less than $25	3.5	5.2	46.5	25.6	19.2
Services for the Elderly	1.4	4.6	39.5	29.0	25.6
Boston	0.8	4.6	37.6	29.1	27.8
$40 or more	1.3	4.5	34.2	30.7	29.3
$25 to $39	1.5	3.6	45.4	25.9	23.5
Less than $25	2.1	7.9	38.4	31.1	20.5

(continued)

Table VI continued

AMOUNT OF SERVICES PREFERRED[a,b]

By Tax Rate[c]

	Cut back a lot	Cut back a little	Keep the same	Increase a little	Increase a lot
State and Community Colleges and Universities	5.1	12.6	54.1	17.4	10.8
Boston	6.6	15.8	49.0	18.3	10.4
$40 or more	6.0	12.5	51.8	17.5	12.2
$25 to $39	4.7	13.3	54.8	17.6	9.7
Less than $25	2.6	8.4	60.5	16.3	12.1
LEGAL SERVICES					
Courts and Judges	6.5	14.2	46.4	20.7	12.1
Boston	3.5	13.1	45.4	22.7	15.3
$40 or more	7.0	14.2	45.9	20.4	12.5
$25 to $39	7.5	12.9	48.0	21.0	10.6
Less than $25	4.0	15.0	46.8	20.8	13.3
PUBLIC ASSISTANCE					
Welfare or other Public Assistance	27.9	26.7	28.7	11.0	5.7
Boston	21.2	23.7	36.0	9.7	9.3
$40 or more	28.3	25.8	28.4	10.6	6.9
$25 to $39	30.2	26.8	28.4	10.7	3.9
Less than $25	27.9	29.5	24.2	12.6	5.8
LOCAL SERVICES	3.7	16.0	43.9	25.5	11.0
Boston	6.5	14.2	31.2	34.8	13.4
$40 or more	4.3	15.8	42.7	25.5	11.7
$25 to $39	2.9	17.8	45.9	22.8	10.6
Less than $25	2.0	12.2	53.1	25.5	7.1
STATE SERVICES	11.3	27.4	25.9	25.4	10.0
Boston	10.9	22.3	32.0	22.7	12.1
$40 or more	10.9	25.3	25.3	26.3	12.1
$25 to $39	11.3	30.1	34.7	26.1	7.8
Less than $25	12.4	27.3	28.9	22.7	8.8

(continued)

Table VI, continued

[a] Based on the question: "Think about the services provided by the state or local government to residents of your town or city. For each service I read, please tell me whether state or local government should be providing a lot less, a little less, the same amount, a little more or a lot more of this service. Remember, if government provides less services state or local taxes will be reduced, and if government provides more services, state or local taxes will be increased. If the service is not available to residents in your city or town, please let me know. Let's begin with ("X'd" ITEM). Which phrase in the first list describes how much more or less ("X'd" ITEM) state or local government should provide?"

[b] Percentages are based on those responding and total to 100% across each row. Totals do not include Boston oversample.

[c] Tax rate is property tax rate per $1,000 of estimated market value.

Amount Residents are Willing to Spend on Services

In response to questions about whether total state or local spending and taxes should be increased, remain the same, or be decreased, a majority of respondents in each group said they wanted to reduce spending and taxes. In no group, however, did a majority of respondents want lower spending on schools. As Table VII shows, spending preferences vary somewhat across community groups:

- Boston respondents were least interested of all respondents in decreasing state government taxes and spending and most likely to favor increases in local government spending and taxes and in school spending.
- Respondents in low tax rate communities were less interested than others in decreasing local government spending and taxes. Moreover, a higher proportion of respondents in this group than in others were satisfied with current spending levels in their communities.
- The greatest discontent with current levels of school spending emerges in the moderate and high tax rate communities.

Perceptions of Inefficiency and Corruption in Government

We use as our measure of perceived inefficiency respondents' beliefs about the extent to which spending can be cut without affecting the quality and quantity of the services provided. Table VIII reports the percentages of respondents in each group who believe that spending cuts of 5 percent or more would significantly affect the level of each specific service and the percentages who believe that spending can be cut by 15 percent or more without significantly affecting service levels. The higher the first percentage, the less inefficiency is perceived. The higher the second percentage, the greater inefficiency is perceived.

Respondents' perceptions of the efficiency of state and local government vary across community groups. Respondents in low tax rate towns are most likely to believe local services are efficiently

Table VII

DESIRED CHANGES IN TAXES AND SPENDING[a]

By Tax Rate

	Total Respondents[b]	Property Tax Rate per $1000 of Estimated Market Value: Boston	$40 or more	$25 to $39	Less than $25
State government spending and taxing should be:					
Increased	15.9%	19.4%	16.9%	14.1%	12.4%
Kept the same	20.5	27.0	20.7	18.3	26.9
Decreased	62.8	53.6	62.5	67.5	60.7
Local government spending and taxing should be:					
Increased	12.4	18.5	12.0	11.6	11.4
Kept the same	27.9	26.2	24.7	28.9	38.3
Decreased	58.6	55.2	63.3	59.5	50.3
Local public school spending and taxing should be:					
Increased	20.0	31.4	20.5	16.2	19.9
Kept the same	35.6	33.5	33.2	37.5	41.3
Decreased	44.4	35.1	46.3	46.2	38.8

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[a] Based on the questions: "Compared to what the state government now spends, by what percentage, if any, would you like to see state government taxing and spending increase or decrease. You may answer any percent increase or decrease from 1% to 100% or tell me you want it to stay the same. And by what percentage, if any, would you like to see local government taxing and spending increase or decrease? And by what percentage, if any, would you like to see local public school taxes and spending increase or decrease?"

[b] Total does not include Boston oversample.

Table VIII

BELIEFS THAT SPENDING CAN BE CUT WITHOUT AFFECTING THE QUALITY OR QUANTITY OF SERVICES: POSSIBLE CUTBACKS OF LESS THAN 5 PERCENT/POSSIBLE CUTBACKS OF 15 PERCENT OR MORE [a,b]

By Tax Rate

Service Type	Total Respondents [c]	Property Tax Rate per $1,000 of Estimated Property Value Boston <5%/≥15%	$40 or more <5%/≥15%	$25 to $39 <5%/≥15%	Less than $25 <5%/≥15%
Municipal Services					
Police	51%/27%	51%/29%	50%/29%	50%/27%	55%/22%
Fire fighting	NA	NA	NA	NA	NA
Street & sidewalk repairs	45/36	44/36	42/38	45/35	50/31
Regular garbage pickup	51/30	45/29	46/35	55/27	58/27
Local public parks and recreation	NA	NA	NA	NA	NA
Support of local public transportation	NA	NA	NA	NA	NA
Local School-related services					
Public elementary and high school education	38/37	43/37	39/39	36/38	44/29
After school programs	42/34	50/32	39/37	42/33	47/32
Special education	58/22	63/23	53/27	59/19	63/17
Adult education	31/45	37/41	28/47	31/45	38/39
Human Resources Services					
Mental health programs	NA	NA	NA	NA	NA
Services for the elderly	NA	NA	NA	NA	NA
State and community colleges and universities	35/40	37/42	30/42	35/42	45/32

(continued)

Table VIII continued

Service Type	Total	Property Tax Rate per $1,000 of Estimated Market Value Boston <5%/>15%	$40 or more <5%/>15%	$25 to $39 <5%/>15%	Less than $25 <5%/>15%
Legal Services					
Courts and Judges	NA	NA	NA	NA	NA
Public Assistance					
Welfare or other public assistance	18%/67%	23%/59%	18%/68%	15%/69%	20%/65%
State Services	11/73	20/57	11/74	10/76	11/69
Local Services	18/60	17/60	13/68	18/58	31/41

[a] Based on the questions: "Now let's talk about some specific services. People we've talked to believe that government could cut back spending on these services by eliminating waste, inefficiency and other problems. By what percentage, if any, do you think government could cut back spending on ("X'd" ITEM) without significantly affecting the quality or amount of services provided?"

"And by what percentage, if any, do you think state government could cut taxes and spending without significantly cutting the amount of services?"

"Overall, by what percentage, if any, do you think your local government could cut taxes and spending without significantly cutting the amount of services?"

[b] Each entry has two numbers. The number to the left of the slash is the percentage of respondents who believe that spending cuts of 5% or more would significantly affect the quality or amount of service provided. The number to the right of the slash is the percentage of respondents who believe spending for that service could be cut by 15% or more without significantly affecting the quality or amount of services provided. Percentages are based on those responding to the question. NA means that the question was not asked.

[c] Total does not include Boston oversample.

provided. In addition, these respondents perceive a greater difference between the efficiency of state and local governments than do respondents in other groups. Boston residents are less likely than others to think state services are inefficiently provided and, along with respondents from other high tax rate communities, see very little difference between state and local governments in terms of efficiency.

With respect to perceptions of the efficiency with which specific services are provided, the following patterns emerge:

- Respondents in low tax rate communities were more likely than others to think that police, garbage pickup and street repair services are efficiently provided.
- Respondents in Boston and in low tax rate communities were more likely than others to think school-related services such as elementary and high school education, after-school programs, special education and adult education are efficiently provided.
- Boston residents were somewhat less likely than others to perceive inefficiency in the provision of welfare services. Respondents in the three other groups tend to agree about the amount by which spending on this service could be cut back without cutting services.

Closely related to perceptions of inefficiency are perceptions about the cost of municipal personnel, citizen abuse of public services, and corruption. The data presented in Table IX indicate that:

- The perception that municipal employees are overpaid is more common in communities with high tax rates than in those with low tax rates. Boston respondents, for example, are nearly twice as likely as respondents in low tax rate towns to believe municipal employees are overpaid (60% vs. 34%).
- Respondents in low tax rate towns are more likely than others to believe that people expect too many services from the government. Perceptions of the abuse of one particularly sensitive service, welfare, does not vary with the local tax rate, with the exception that Boston residents are less

Table IX

ATTITUDES TOWARD GOVERNMENT AND TAXES[a,b]

By Tax Rate

	Total Respondents[c]	Property Tax Rate per $1,000 of Estimated Property Value			
		Boston	$40 or more	$25 to $39	Less than $25
The government should make sure that each family has enough to live on	65.5%	64.9	68.8%	64.0%	58.0%
People expect too many services from government	68.4	63.8	66.1	70.1	75.5
Government interferes to much in people's lives	76.5	68.4	75.4	79.7	77.6
People now on welfare could find jobs if they really tried	78.8	61.2	82.8	79.5	79.0
City or town employees are overpaid	47.1	60.2	53.4	42.0	34.2
City or town employees don't work as hard as people who work for private companies	66.7	70.9	69.3	66.2	58.6
Proposition 13 in California showed that taxes can be cut without cuts in services	63.8	52.9	65.4	64.7	61.9
Corruption is common in my local government	63.4	87.7	70.0	55.1	50.8
Corruption is common in my state government	87.8	89.8	87.3	88.7	85.4

(continued)

Table IX continued

ATTITUDES TOWARD GOVERNMENT AND TAXES[a,b]

By Tax Rate

	Total Respondents[c]	Property Tax Rate per $1,000 of Estimated Property Value			
		Boston	$40 or more	$25 to $39	Less than $25
A graduated income tax is the best way for the state to raise money	61.9%	68.3%	60.4%	61.4%	60.4%
A sales tax is the best way for the state to raise money[d]	73.1	71.3	74.5	72.9	73.6
The property tax is the best way for cities and towns to raise money for city services	58.2	46.7	59.5	59.8	58.5
It's OK for property taxes to rise as fast as the cost of living	21.8	27.9	20.1	21.6	25.4
State government should give more money to the cities and towns so local property taxes can be kept down	77.2	71.8	81.2	77.9	66.5
Taxpayers in rich cities and towns should help pay for services in poorer cities and towns	41.8	50.8	42.4	39.7	39.8
A cut in property taxes would benefit homeowners more than business and industry	59.6	50.2	63.3	59.3	54.8
When property taxes go up, landlords just raise rents	89.4	89.1	88.8	89.9	88.6
When business property taxes go up, businesses just raise their prices to consumers	88.0	88.3	88.1	88.9	86.1

(continued)

Table IX continued

[a] Based on the question: "Now I'd like to get your opinions on tax and other government issues. For each statement I read, tell me whether you agree a lot, agree a little, disagree a little or disagree a lot. How much do you agree or disagree that ______________________."

[b] Each entry is the percentage of respondents who agree "a lot" or "a little" that the particular outcome will occur. Percentages are based on those responding to the question.

[c] Total does not include Boston oversample.

[d] This question was asked of only a subsample of respondents.

likely than others to believe that "people now on welfare could find jobs if they really tried."

- The belief that corruption is common in local government varies systematically across groups; 87.7 percent of the Boston respondents think their local government is corrupt in contrast to 70.0, 55.1 and 50.8 percent in the other groups. Beliefs about corruption in state government do not vary much across groups.

Preferred Method of Financing Services

Table X shows that most respondents want to retain the property tax as the major revenue source for financing traditional municipal services. A majority, however, would like to shift toward more state financing of special education (60 percent of which is currently financed locally) and toward more state or user charge financing of local public transit. In general, the lower the local tax rate, the higher the proportion of residents who would like to maintain the current financing method or put greater reliance on local property taxes for traditional municipal services. In the case of public education, for example, 64 percent of the respondents in towns with low tax rates, in contrast to 41 percent in Boston, 51 percent in high tax, and 57 percent in moderate tax communities, are content with the current or increased reliance on local property taxes. Respondents in Boston and other high tax rate cities and towns showed more interest than others in shifting to state taxes, particularly income taxes, for most services.

In addition, Boston residents were more likely than others to believe "a graduated income tax is the best way for the state to raise money" and less likely than others to believe "property taxes are the best way for cities and towns to raise money for city services."

Respondents in high and moderate tax rate communities other than Boston are more likely than others to think the state government should give additional money to the cities and towns so local property

Table X

PREFERRED METHOD OF FINANCING PUBLIC SERVICES[a,b]

By Tax Rate[c]

		Greater Share of Money Should Come From:				
Service Type	Keep Financing the Same	Local Property Taxes	State Income Taxes	State Sales Taxes	User Fees	Other Sources
MUNICIPAL SERVICES						
Police	24.4%	50.7%	16.6%	5.2%	2.2%	0.9%
Boston	20.2	48.0	22.6	5.6	1.6	2.0
$40 or more	23.5	46.5	18.1	7.6	3.0	1.5
$25 to $39	25.2	54.0	15.5	3.5	1.6	0.2
Less than $25	29.4	52.6	12.4	3.1	2.1	0.5
Local Public Parks and Recreation	21.9	49.0	12.2	7.1	8.4	1.4
Boston	18.0	47.8	13.9	9.0	10.2	1.2
$40 or more	22.7	46.0	12.6	9.0	8.4	1.3
$25 to $39	19.3	53.6	12.0	4.7	9.5	1.0
Less than $25	30.2	42.7	13.0	7.3	4.7	2.1
Support of Local Public Transportation	17.3	18.2	23.3	12.4	25.7	3.1
Boston	8.6	15.6	30.7	14.3	27.5	3.3
$40 or more	18.6	17.3	23.5	12.8	24.5	3.4
$25 to $39	14.9	21.2	21.2	11.7	28.4	2.5
Less than $25	27.0	14.1	24.3	11.4	20.0	3.2
LOCAL SCHOOL-RELATED SERVICES						
Public Elementary and High School Education	20.3	34.1	28.4	8.5	7.2	1.5
Boston	14.2	26.8	37.8	11.4	7.7	2.0
$40 or more	20.9	30.0	29.2	9.4	8.6	2.0
$25 to $39	19.3	38.0	29.2	6.9	5.6	1.0
Less than $25	24.2	39.5	20.0	7.9	7.4	1.1
After School Programs such as Music and Art	19.6	39.1	13.3	6.2	20.5	1.3
Boston	15.4	32.8	19.1	7.5	22.8	2.5
$40 or more	20.6	37.5	15.0	7.3	18.3	1.3
$25 to $39	17.3	43.0	11.0	5.1	22.2	1.3
Less than $25	27.6	37.0	10.4	6.2	17.7	1.0

(continued)

Table X (continued)

PREFERRED METHOD OF FINANCING PUBLIC SERVICES[a,b]

By Tax Rate[c]

Service Type	Keep Financing the Same	Greater Share of Money Should Come From: Local Property Taxes	State Income Taxes	State Sales Taxes	User Fees	Other Sources
Special Education for Children With Learning Problems	16.9%	15.2%	48.4%	12.1%	5.9%	1.5%
Boston	13.1	13.9	51.8	13.1	6.5	1.6
$40 or more	18.4	13.8	45.8	13.0	6.5	2.5
$25 to $39	14.7	16.4	51.1	11.7	5.3	0.8
Less than $25	22.6	18.8	43.0	9.7	5.9	0.0
Adult Education	19.8	20.3	19.6	6.6	32.4	1.3
Boston	16.1	14.1	24.0	5.8	37.2	2.9
$40 or more	21.4	19.5	19.3	7.4	31.0	1.3
$25 to $39	16.9	22.4	17.6	6.8	35.7	0.7
Less than $25	27.5	21.8	21.8	4.1	22.8	2.1
HUMAN RESOURCES SERVICES						
Mental Health Programs	16.5	5.4	57.8	13.7	4.8	1.8
Boston	15.3	6.6	54.1	14.9	6.6	2.5
$40 or more	19.1	6.7	53.9	13.7	4.7	1.8
$25 to $39	12.5	4.0	64.1	13.5	4.5	1.3
Less than $25	21.1	4.2	52.6	12.6	6.3	3.2
State and Community Colleges and Universities	16.5	3.4	46.1	12.0	20.7	1.3
Boston	11.6	6.2	47.3	10.8	22.4	1.7
$40 or more	17.0	4.0	42.0	14.1	21.0	2.0
$25 to $39	15.3	2.3	48.1	10.3	22.8	1.2
Less than $25	21.9	3.6	49.5	10.9	14.1	0.0

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[a] Based on the question: "For each service I read, would you like to keep the financing the way it now is or to see a greater share of the money come from local property taxes, from state income taxes, from state sales taxes, or a greater share from fees paid by users of the service?"

[b] Percentages are calculated for respondents who answered each question, and total to 100% across each row. Totals do not include Boston oversample.

[c] Tax rate is property tax rate per $1,000 of estimated property value.

taxes can be kept down. Support for greater state aid to local governments does not imply support for redistributing money across jurisdictions, however. Only in Boston were a majority of respondents interested in such redistribution.

Relative Cost of Services to Various Groups in the Population

At least half the respondents in each group think they receive less in services than they pay for. This dissatisfaction is greatest in high tax rate communities, including Boston, where about 60 percent of the respondents are dissatisfied.

AMOUNT OF SERVICES RESPONDENT'S HOUSEHOLD GETS
FOR TAXES THEY PAY
By Tax Rate

	My Household Gets Less Than It Pays For		My Household Gets Amount It Pays For	My Household Gets More Than It Pays For	
	Lot Less	Little Less		Little More	Lot More
Total	19.9%	35.5%	36.1%	6.3%	2.1%
Boston	25.1	35.6	29.6	7.7	2.0
$40 or more	20.8	38.6	32.6	6.3	1.8
$25 to $39	18.9	32.6	40.9	5.1	2.4
Less than $25	21.2	38.7	36.8	7.3	1.0

Respondent perceptions of the cost of services to their household compared to the cost of services to other types of households differ across tax rate categories (see Table XI).

- Boston respondents were more likely than others to think that they pay more for their household services than do middle class families and homeowners. They were least likely to think they pay more than renters, poor families or minority groups. This may reflect the greater likelihood of a Boston resident being a renter, poor, or a member of a minority group.
- Respondents in low tax rate towns were least likely to think their households pay more for services than do business or

Table XI

AMOUNT RESPONDENT'S HOUSEHOLD PAYS FOR SERVICES IT RECEIVES COMPARED TO AMOUNT OTHER GROUPS PAY FOR SERVICES THEY RECEIVE[a,b]

By Tax Rate[c]

	Compared to what these households or groups pay for the services they use, my household pays:				
	Much more for the services it receives	Somewhat more for the services it receives	Same amount for the services it receives	Somewhat less for the services receives	Much less for the services it receives
Middle Class Families	5.8%	10.6%	55.1%	20.7%	7.7%
Boston	10.6	13.5	48.6	18.4	9.0
$40 or more	5.6	12.3	52.6	22.1	7.3
$25 to $39	4.3	8.1	59.2	20.6	7.9
Less than $25	7.9	11.6	55.8	17.9	6.8
Poor Families	30.8	13.8	25.0	19.5	10.7
Boston	28.3	10.2	29.5	16.0	10.7
$40 or more	30.0	14.1	25.0	22.1	9.8
$25 to $39	31.8	14.6	24.2	18.9	10.6
Less than $25	34.0	12.6	25.7	25.7	12.0
Renters	13.1	16.3	41.1	21.5	8.0
Boston	7.4	15.2	47.7	20.2	9.5
$40 or more	13.9	17.6	40.4	21.1	6.9
$25 to $39	12.5	15.1	42.4	22.0	8.1
Less than $25	18.4	18.9	34.1	21.1	7.6
Home Owners	6.2	12.1	59.5	16.6	5.7
Boston	12.3	16.8	50.4	15.2	5.3
$40 or more	5.5	15.8	58.0	13.4	7.3
$25 to $39	3.6	10.5	62.7	17.7	5.4
Less than $25	7.4	10.5	60.5	16.8	5.8
Minority Groups	35.8	15.6	26.9	13.9	7.7
Boston	34.3	12.0	28.8	17.2	7.7
$40 or more	37.2	16.2	27.8	12.4	6.4
$25 to $39	36.9	14.4	26.0	14.1	8.5
Less than $25	30.8	20.5	27.0	14.0	7.6
Retired People	14.7	12.1	36.2	23.5	13.5
Boston	20.3	10.4	38.6	19.1	11.6
$40 or more	15.1	13.9	36.0	23.1	11.9
$25 to $39	13.6	10.4	35.6	24.8	15.6
Less than $25	13.5	15.1	37.0	22.4	12.0
Business and Industry	42.2	20.5	24.4	9.4	3.3
Boston	46.6	19.1	25.8	6.4	2.1
$40 or more	46.0	19.7	22.3	8.9	3.0
$25 to $39	40.1	21.3	25.7	9.7	3.2
Less than $25	34.6	20.7	28.2	12.2	4.3

(continued)

Table XI (continued)

AMOUNT RESPONDENT'S HOUSEHOLD PAYS FOR SERVICES IT RECEIVES COMPARED TO AMOUNT OTHER GROUPS PAY FOR SERVICES THEY RECEIVE[a,b]

By Tax Rate[c]

[a] Based on the question: "Sometimes it seems that certain groups of people pay a lot in taxes but don't get very many services while others don't pay much in taxes but get a lot of services. Please tell me whether (X'd GROUP) gets a lot less than they pay for, a little less, the same amount as they pay for, a little more, or a lot more than they pay for." Responses were scored on a five-point scale ranging from one (lot less) to five (lot more). Respondent's score for own household was subtracted from his/her score for other groups. "Much less" is a score of two or more, "Somewhat less" is a score of one, "Same amount" is a score of zero, "Somewhat more" is a score of minus one, and "Much more" is a score of minus two or less.

[b] Percentages are calculated for respondents who answered each question, and total to 100% across each row. Totals do not include Boston oversample.

[c] Tax rate is property tax rate per $1,000 of estimated property value.

industry. Nevertheless, even among these respondents, more than half believe they pay more for the services they receive than the business sector pays for the services it receives.

Slightly less than half the respondents reported that the services they received at the time of the survey for the taxes they paid were about the same as they were two years earlier; a similar proportion reported that things were getting worse. Essentially no differences emerge across community groups.

CURRENT RATIO OF SERVICES RECEIVED TO TAXES PAID
COMPARED TO TWO YEARS AGO
By Tax Rate

	Compared to two years ago, my household is:		
	Better Off	About the same	Worse off
Total	7.5%	46.6%	45.9%
Boston	7.1	49.0	43.9
$40 or more	8.0	47.0	45.0
$25 to $39	6.4	45.9	47.7
Less than $25	9.4	45.8	44.8

As Table XII demonstrates, at least half the respondents reported that the relationship between their household service costs and those of most other groups had remained relatively constant over the previous two years. Only when comparing their service costs to those of business and industry did more than a third of the respondents feel they were worse off than they were two years earlier. Respondents in low tax rate towns were less likely than others to think the cost of their households' services worsened relative to that of business and industry.

IV. SUMMARY

Because Proposition 2 1/2 requires larger revenue reductions in communities with high tax rates than in those with low rates, we hypothesized that residents' expectations about the effects of Proposition 2 1/2 would vary systematically across communities grouped by local tax rate. The observed patterns are generally consistent

Table XII

CHANGE OVER PAST TWO YEARS
IN AMOUNT RESPONDENT'S HOUSEHOLD PAYS FOR SERVICES IT RECEIVES COMPARED TO AMOUNT OTHER GROUPS PAY FOR SERVICES THEY RECEIVE[a,b]

By Tax Rate[c]

	Compared to these groups, my household is:				
	Much better off	Somewhat better off	About the same	Somewhat worse off	Much worse off
Middle Class Families	2.9%	22.2%	66.8%	6.6%	1.5%
Boston	2.6	28.9	60.9	6.0	1.7
$40 or more	2.7	22.5	64.3	8.8	1.7
$25 to $39	2.9	21.4	69.9	5.1	0.7
Less than $25	4.2	17.7	69.3	5.7	3.1
Poor Families	3.6	26.2	52.3	12.5	5.4
Boston	3.0	32.8	51.1	9.8	3.4
$40 or more	4.0	25.8	51.1	13.8	5.3
$25 to $39	2.8	26.3	52.2	12.6	6.1
Less than $25	4.7	21.6	58.4	10.0	5.3
Renters	3.1	22.6	60.5	11.5	2.3
Boston	3.8	26.3	62.3	5.9	1.7
$40 or more	2.5	23.4	60.8	11.6	1.7
$25 to $39	2.7	21.9	60.9	11.8	2.8
Less than $25	5.3	19.1	58.5	14.4	2.7
Home Owners	2.9	20.8	68.8	6.1	1.5
Boston	2.1	24.9	62.0	8.4	2.5
$40 or more	3.2	19.9	67.9	6.5	2.5
$25 to $39	3.0	21.0	70.8	4.6	0.7
Less than $25	2.1	19.5	70.5	7.9	0.0
Minority Groups	2.4	17.7	47.8	20.8	11.3
Boston	1.7	25.3	48.9	15.5	8.6
$40 or more	2.8	16.4	46.3	23.0	11.4
$25 to $39	2.2	16.7	47.7	21.2	12.2
Less than $25	1.6	18.5	53.4	16.9	9.5
Retired People	4.1	28.9	54.3	9.6	3.1
Boston	3.8	33.3	53.0	7.7	2.1
$40 or more	4.3	27.0	55.3	9.8	3.5
$25 to $39	3.1	30.0	55.1	9.7	2.1
Less than $25	6.3	27.2	50.8	9.9	5.8
Business and Industry	1.7	10.8	43.9	28.4	15.3
Boston	1.3	8.7	45.2	28.3	16.5
$40 or more	1.9	10.1	42.4	29.7	16.0
$25 to $39	2.2	10.6	44.5	26.9	15.8
Less than $25	0.0	15.0	50.3	24.6	10.2

Table XII (continued)

CHANGE OVER PAST TWO YEARS IN AMOUNT RESPONDENT'S HOUSEHOLD PAYS FOR SERVICES IT RECEIVES COMPARED TO AMOUNT OTHER GROUPS PAY FOR SERVICES THEY RECEIVE[a,b]

By Tax Rate[c]

[a] Based on the question: "Now we'd like you to think about two years ago. Taking into account the services they get for the taxes they pay, are (X'd GROUP) better off, worse off, or about the same now as they were two years ago?" Responses were scored on a three-point scale ranging from one (better off) to three (worse off). Respondent's score for his or her household was subtracted from his or her score for other groups. "Much better off" is a score of minus two, "Somewhat better off" is a score of minus one, "About the same" is a score of zero, "Somewhat worse off" is a score of plus one, and "Much worse off" is a score of plus two.

[b] Percentages are calculated for respondents who answered each question, and total to 100% across each row. Totals do not include Boston oversample.

[c] Tax rate is property tax rate per $1,000 of estimated property value.

with this prediction. The higher the local tax rate, the more likely respondents were to expect lower taxes. Surprisingly, however, these expected tax reductions were not systematically translated into expected reductions in specific local services. That is, respondents in communities with high tax rates were no more likely than those in communities with moderate or low tax rates to expect cuts in specific local services. Only the Boston respondents were more likely than those in other groups to expect cuts in many of the specific local services, but even they were no more likely than others to expect cuts in police and fire services.

Although not based on firm theoretical hypotheses, the observed differences across community groups in preferences for changes in service levels, taxes and government operations are enlightening and confirm initial speculations that the higher the local tax rate the less satisfied residents were likely to be with their fiscal situations. In general, we find that residents in high tax rate communities were more likely than others to want higher levels of local public services, to believe that their local government was inefficient and corrupt, and to believe that municipal employees were overpaid. In addition, respondents in high tax rate areas were more likely than others to prefer a shift away from local property tax financing to financing by state government or users. Moreover, respondents in high tax rate cities and towns were more likely than others to believe that they received less in services than they paid for in taxes. Interestingly, however, they were no more likely than others to feel that their fiscal situation had deteriorated during the two years prior to the Proposition 2 1/2 vote.

The differences in fiscal dissatisfaction across communities grouped by local tax rate are interesting in their own right and worthy of further investigation. The link between fiscal dissatisfaction and the vote on Proposition 2 1/2 is ambiguous, however. Support for Proposition 2 1/2 across communities is not a simple function of voters' dissatisfaction with their fiscal situation; the "yes" vote of our Boston sample, for example, was less than that of communities with moderate tax rates despite the greater fiscal discontent found among respondents in the Boston sample. This partially reflects the finding that respondents in high tax rate areas wanted relatively more, rather than fewer, services and that respondents in different communities had differing expectations about the impact of Proposition 2 1/2 on service levels and governmental efficiency.[1]

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[1] For complete multivariate models of voter behavior, see Ladd and Wilson, "Who Supports Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2" and "Why Voters Support Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2."

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APPENDIX A

STATISTICAL SIGNIFICANCE OF PERCENTAGE DIFFERENCES

STATISTICAL SIGNIFICANCE OF PERCENTAGE DIFFERENCES

The following tables are guides for determining the significance (two standard errors) of differences in percentages between any two subgroups in the overall sample. The size of the difference necessary for significance decreases as the sample sizes increase and as the percentages being compared move away from 50 percent in either direction. Thus, a separate table is presented for each of four sets of percentages. The entries in each cell define the range of necessary differences for samples of varying sizes. The lower number is the difference required for significance between two simple random samples. The higher number, 1.25 times the lower number, is a conservative estimate of the difference required for significance when other sample designs are used.

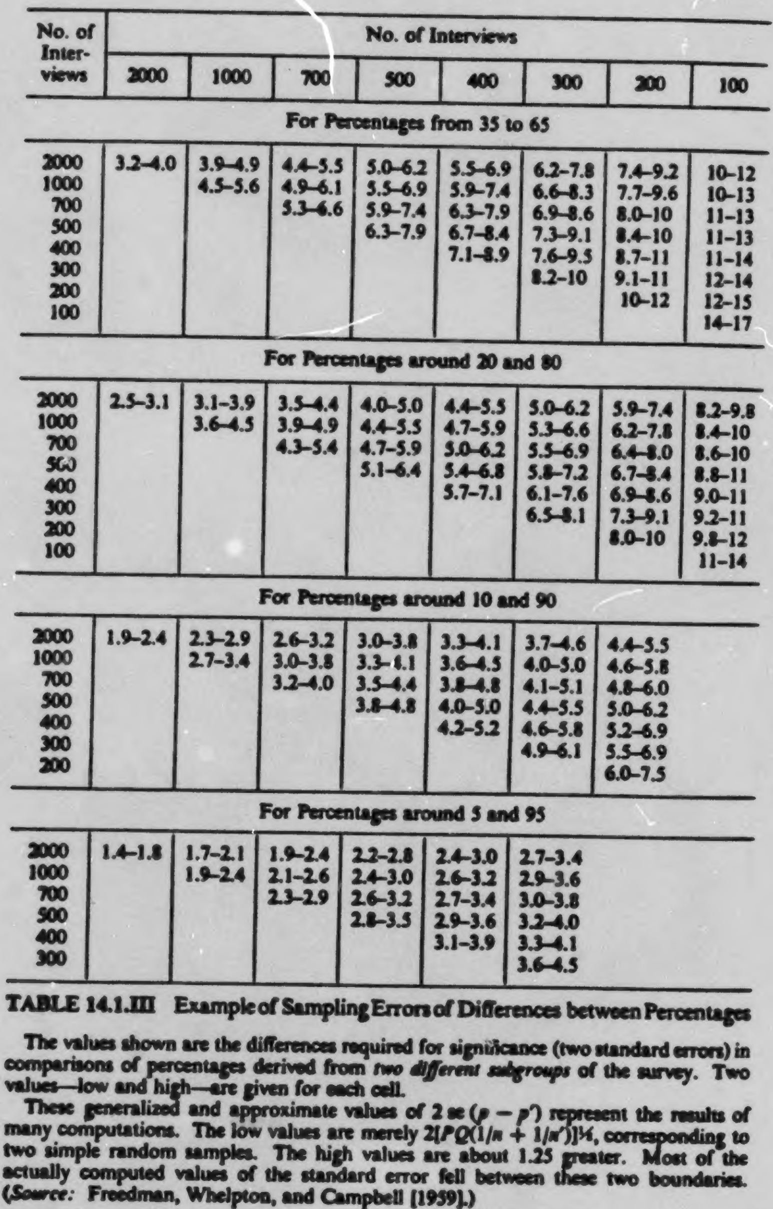
A stratified random cluster sample plan was used in this study. Stratification reduces the size of the standard errors relative to those in simple random samples; clustering increases the size of the standard errors. Because the sampling plan incorporated a large number of clusters (65) with a small number of interviews in each cluster (15 to 25), any increase in standard errors due to clustering should be minor and more than offset by the decreases gained through stratification. Thus the entries at the lower end of each scale represent conservative estimates of the difference in percentages required for significance between any two subgroups in this study.

The sizes of the subgroups analyzed in this paper are as follows:

Subgroup	Number in Sample
Boston	248
High tax rate community	615
Moderate tax rate community	620
Low tax rate community	197

Table A-I

EXAMPLE OF SAMPLING ERRORS OF DIFFERENCES BETWEEN PERCENTAGES[1]



No. of Inter- views	No. of Interviews							
	2000	1000	700	500	400	300	200	100
For Percentages from 35 to 65								
2000	3.2–4.0	3.9–4.9	4.4–5.5	5.0–6.2	5.5–6.9	6.2–7.8	7.4–9.2	10–12
1000		4.5–5.6	4.9–6.1	5.5–6.9	5.9–7.4	6.6–8.3	7.7–9.6	10–13
700			5.3–6.6	5.9–7.4	6.3–7.9	6.9–8.6	8.0–10	11–13
500				6.3–7.9	6.7–8.4	7.3–9.1	8.4–10	11–13
400					7.1–8.9	7.6–9.5	8.7–11	11–14
300						8.2–10	9.1–11	12–14
200							10–12	12–15
100								14–17
For Percentages around 20 and 80								
2000	2.5–3.1	3.1–3.9	3.5–4.4	4.0–5.0	4.4–5.5	5.0–6.2	5.9–7.4	8.2–9.8
1000		3.6–4.5	3.9–4.9	4.4–5.5	4.7–5.9	5.3–6.6	6.2–7.8	8.4–10
700			4.3–5.4	4.7–5.9	5.0–6.2	5.5–6.9	6.4–8.0	8.6–10
500				5.1–6.4	5.4–6.8	5.8–7.2	6.7–8.4	8.8–11
400					5.7–7.1	6.1–7.6	6.9–8.6	9.0–11
300						6.5–8.1	7.3–9.1	9.2–11
200							8.0–10	9.8–12
100								11–14
For Percentages around 10 and 90								
2000	1.9–2.4	2.3–2.9	2.6–3.2	3.0–3.8	3.3–4.1	3.7–4.6	4.4–5.5	
1000		2.7–3.4	3.0–3.8	3.3–4.1	3.6–4.5	4.0–5.0	4.6–5.8	
700			3.2–4.0	3.5–4.4	3.8–4.8	4.1–5.1	4.8–6.0	
500				3.8–4.8	4.0–5.0	4.4–5.5	5.0–6.2	
400					4.2–5.2	4.6–5.8	5.2–6.9	
300						4.9–6.1	5.5–6.9	
200							6.0–7.5	
For Percentages around 5 and 95								
2000	1.4–1.8	1.7–2.1	1.9–2.4	2.2–2.8	2.4–3.0	2.7–3.4		
1000		1.9–2.4	2.1–2.6	2.4–3.0	2.6–3.2	2.9–3.6		
700			2.3–2.9	2.6–3.2	2.7–3.4	3.0–3.8		
500				2.8–3.5	2.9–3.6	3.2–4.0		
400					3.1–3.9	3.3–4.1		
300						3.6–4.5		

TABLE 14.1.III Example of Sampling Errors of Differences between Percentages

The values shown are the differences required for significance (two standard errors) in comparisons of percentages derived from *two different subgroups* of the survey. Two values—low and high—are given for each cell.

These generalized and approximate values of $2\,\text{se}\,(p - p')$ represent the results of many computations. The low values are merely $2[PQ(1/n + 1/n')]^{1/2}$, corresponding to two simple random samples. The high values are about 1.25 greater. Most of the actually computed values of the standard error fell between these two boundaries. (*Source:* Freedman, Whelpton, and Campbell [1959].)

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[1] Leslie Kish, Survey Sampling. New York: John Wiley and Sons, Inc., 1965, p. 580.

APPENDIX B: BOSTON

The following tables provide information on the expectations and preferences of Boston residents disaggregated by those voting "yes" and those voting "no" on Proposition 2½. The tables are based on those 248 randomly selected respondents who comprise the Boston sample.

TABLE B-I

PERCENTAGE OF RESPONDENTS EXPECTING SERVICE CUTBACKS BECAUSE OF PROPOSITION 2 1/2--BOSTON[a,b]

By Vote

Service Type	Total Boston Respondents	Vote on Proposition 2½		Difference: Vote Yes Minus Vote No
		Yes	No	
Municipal Services				
Police	43.9%	28.5%	54.6%	-26.1%
Fire fighting	43.9	29.8	55.8	-26.0
Street & sidewalk repairs	67.9	66.0	78.8	-22.8
Regular garbage pickup	45.9	38.7	49.4	-10.7
Local public parks and recreation	73.7	69.2	86.0	-16.8
Support of local public transportation	59.1	54.4	62.6	-8.2
Local School-related Services				
Public elementary and high school education	61.6	48.4	77.6	-29.2
After school programs	77.4	77.4	80.5	-3.1
Special education	57.2	45.7	70.9	-25.2
Adult education	74.3	74.5	81.6	-7.1
Human Resources Services				
Mental health programs	61.5	58.5	67.4	-8.9
Services for the elderly	57.2	46.3	71.3	-25.0
State and community colleges and universities	62.4	61.3	63.5	-2.2
Legal Services				
Courts and judges	38.3	32.6	42.4	-9.8
Public Assistance				
Welfare or other public assistance	65.4	56.8	77.0	-20.2
Local services	76.4	72.6	83.7	-11.1
Services my household uses	54.7	38.3	66.3	-28.0

Footnotes on following page.

TABLE B-I (continued)

[a] Based on the questions:
"Now that Proposition 2½ has passed, what do you think will happen to services I read. Using the first list of phrases tell me whether you think there will be a lot less, a little less, the same, a little more or a lot more ("X'd ITEM) services now that Proposition 2½ has passed?"

"Overall, how do you think the passage of Proposition 2½ will affect your community--do you think the services your local government offers will be cut back a lot, cut back a little, remain the same, increase a little or increase a lot?"

"How about you and members of your household? Now that Proposition 2½ has passed, do you think the public services your household uses will be cut back a lot, cut back a little, remain the same, increase a little, or increase a lot?"

[b] Each entry is the percentage of respondents who think there will be a lot less or a little less of that particular service or who think that community or household services will be cut back a lot or cut back a little. Percentages are based on those responding to the question.

Table B-II

PERCEIVED EFFECTS OF PROPOSITION 2 1/2--BOSTON[a]

By Vote on Proposition 2 1/2

Proposition 2 1/2 will:	Total Boston Respondents	Vote on Proposition 2 1/2		Difference: Vote Yes Minus Vote No
		For	Against	
Lower property taxes in Mass.	85.8%	91.6%	80.5%	11.1%
Encourage state legislature to reform taxes	81.6	90.5	76.2	14.3
Increase Mass. state income taxes	65.0	59.8	77.6	-17.8
Increase state sales tax	75.5	75.0	80.2	-5.2
Increase state aid to cities and towns	49.2	60.4	45.4	15.0
Give state government more control over local matters	48.7	38.9	53.0	-14.1
Make local government more efficient	55.7	73.7	38.8	34.9
Give local voters more control over school spending	62.5	78.3	44.2	34.1
Decrease funds for local public schools	78.8	75.8	81.6	-5.8
Lower rents	36.2	45.6	25.3	20.3
Attract more business & industry to Massachusetts	73.3	87.2	64.7	22.5

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[a] Based on the question: "Next, I will read a list of some of the effects that the passage of Proposition 2 1/2 might have in Massachusetts. To what extent do you agree or disagree that Proposition 2 1/2 will________? Do you agree a lot, agree a little, disagree a little, or disagree a lot?"

[b] Each entry is the percentage of respondents who agree "a lot" or "a little" that the particular outcome will occur. Percentages are based on those responding to the question.

Table B-III

AMOUNT OF SERVICES PREFERRED--BOSTON[a,b]

By Vote on Proposition 2½

	Cut back a lot	Cut back a little	Keep the same	Increase a little	Increase a lot
MUNICIPAL SERVICES					
Police	1.6%	5.3%	34.1%	30.5%	28.5%
Voted yes	2.1	6.3	33.7	32.6	25.3
Voted no	0.0	3.5	35.3	30.6	30.6
Fire	0.8	4.1	69.1	15.9	10.2
Voted yes	0.0	6.3	73.7	8.4	11.6
Voted no	1.2	3.5	65.9	21.2	8.2
Street Repairs	1.6	6.1	43.1	26.8	22.4
Voted yes	3.2	7.4	43.2	31.6	14.7
Voted no	1.2	4.7	48.2	23.5	22.4
Garbage Pickup	1.3	9.7	69.7	9.2	10.1
Voted yes	3.3	14.3	68.1	6.6	7.7
Voted no	0.0	7.2	77.1	7.2	8.4
Parks & Recreation	4.1	11.2	52.9	20.2	11.6
Voted yes	6.4	19.4	51.6	17.2	5.4
Voted no	3.6	9.6	50.6	21.7	14.5
Local Public Transportation	12.3	10.3	20.6	21.8	35.0
Voted yes	16.3	12.0	25.0	21.7	25.0
Voted no	12.9	11.8	16.5	21.2	37.6
LOCAL SCHOOL-RELATED SERVICES					
Public Elementary & High School Education	4.8	10.4	33.0	24.3	27.4
Voted yes	3.0	16.1	33.3	23.0	19.5
Voted no	2.5	8.6	30.9	27.2	30.9
After school programs	8.1	13.1	39.0	21.2	18.6
Voted yes	14.3	16.5	44.0	14.3	11.0
Voted no	3.7	13.6	43.2	21.0	18.5
Special Education	3.8	6.0	29.4	27.7	33.2
Voted yes	3.3	11.1	32.2	28.9	24.4
Voted no	6.1	2.4	32.9	24.4	34.2

(continued)

Table B-III (continued)

AMOUNT OF SERVICES PREFERRED--BOSTON[a,b]

By Vote on Proposition 2½

	Cut back a lot	Cut back a little	Keep the same	Increase a little	Increase a lot
Adult Education	5.0%	15.1%	49.4%	17.6%	13.0%
Voted yes	7.7	23.1	44.0	15.4	9.9
Voted no	3.6	9.6	54.2	16.9	15.7
HUMAN RESOURCES SERVICES					
Mental Health Programs	4.3	7.4	36.5	27.0	24.8
Voted yes	6.7	6.7	43.8	24.7	18.0
Voted no	3.8	8.8	28.8	27.5	31.2
Services for the Elderly	0.8	4.6	37.6	29.1	27.8
Voted yes	2.2	6.6	44.0	24.2	23.1
Voted no	0.0	2.4	39.0	28.0	30.5
State & Community Colleges & Universities	6.6	15.8	49.0	18.3	10.4
Voted yes	14.0	20.4	50.5	11.8	3.2
Voted no	3.6	11.9	47.6	21.4	15.5
LEGAL SERVICES					
Courts and Judges	3.5	13.1	45.4	22.7	15.3
Voted yes	3.3	18.9	43.3	15.6	18.9
Voted no	5.1	7.7	47.4	26.9	12.8
PUBLIC ASSISTANCE					
Welfare or other Public Assistance	21.2	23.7	36.0	9.7	9.3
Voted yes	31.1	34.4	25.6	3.3	5.6
Voted no	13.2	16.9	44.6	12.0	13.2
Local Services	6.5	14.2	31.2	34.8	13.4
Voted yes	12.6	22.1	31.6	27.4	6.3
Voted no	2.3	9.3	33.7	36.0	18.6
State Services	10.9	22.3	32.0	22.7	12.1
Voted yes	17.9	33.7	34.7	8.4	5.3
Voted no	9.3	12.8	37.2	26.7	14.0

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[a] Based on the question: "Think about the services provided by the state or local government to residents of your town or city. For each service I read, please tell me whether state or local government should be providing a lot less, a little less, the same amount, a little more or a lot more of this service. Remember, if government provides less services state or local taxes will be reduced, and if government provides more services, state or local taxes will be increased. If the service is not available to residents in your city or town, please let me know. Let's begin with ("X'd" ITEM). Which phrase in the first list describes how much more or less ("X'd" ITEM) state or local government should provide?"

[b] Percentages are based on those responding to the question & total 100% across each row.

Table B-IV

BELIEFS THAT SPENDING CAN BE CUT
WITHOUT AFFECTING THE QUALITY OR QUANTITY OF SERVICES:
POSSIBLE CUTBACKS OF LESS THAN 5 PERCENT/POSSIBLE CUTBACKS OF 15 PERCENT OR MORE--BOSTON[a,b]

By Vote on Proposition 2½

Service Type	Total Boston Respondents <5%/≥15%	Vote on Proposition 2½	
		Yes	No
		<5%/≥15%	
Municipal Services			
Police	51%/29%	42%/31%	57%/28%
Fire fighting	NA	NA	NA
Street & sidewalk repairs	44/36	38/45	48/31
Regular garbage pickup	45/29	40/35	53/26
Local public parks and recreation	NA	NA	NA
Support of local public transportation	NA	NA	NA
Local School-related Services			
Public elementary and high school education	43/37	29/46	44/36
After school programs	50/32	39/40	58/26
Special education	63/23	54/26	69/19
Adult education	37/41	32/50	43/35
Human Resources Services			
Mental health programs	NA	NA	NA
Services for the elderly	NA	NA	NA
State and community colleges and universities	37/42	28/52	49/31
Legal Services			
Courts and judges	NA	NA	NA
Public Assistance			
Welfare or other public assistance	23/59	11/71	31/50
State Services	20/57	10/67	24/55
Local Services	17/60	5/69	27/53

[a,b] Footnotes on following page.

Table B-IV (continued)

[a] Based on the questions: "Now let's talk about some specific services. People we've talked to believe that government could cut back spending on these services by eliminating waste, inefficiency and other problems. By what percentage, if any, do you think government could cut back spending on ("X'd" ITEM) without significantly affecting the quality or amount of services provided?"

"And by what percentage, if any, do you think state government could cut taxes and spending without significantly cutting the amount of services?"

"Overall, by what percentage, if any, do you think your local government could cut taxes and spending without significantly cutting the amount of services?"

[b] Each entry has two numbers. The number to the left of the slash is the percentage of respondents who believe that spending cuts of 5% or more would significantly affect the quality or amount of service provided. The number to the right of the slash is the percentage of respondents who believe spending for that service could be cut by 15% or more without significantly affecting the quality or amount of services provided. Percentages are based on those responding to the question. NA means that the question was not asked.

Table B-V

ATTITUDES TOWARD GOVERNMENT AND TAXES--BOSTON[a,b,c]

By Vote on Proposition 2 1/2

	Total Boston Respondents	Vote on Proposition 2 1/2		Difference: Vote Yes Minus Vote No
		Yes	No	
The government should make sure that each family has enough to live on	64.9%	47.8%	75.9%	-28.1%
People expect too many services from government	63.8	77.4	63.2	+14.2
Government interferes too much in people's lives	68.4	80.6	60.0	+20.6
People now on welfare could find jobs if they really tried	61.2	65.6	48.8	+16.8
City or town employees are overpaid	60.2	76.4	44.6	+31.8
City or town employees don't work as hard as people who work for private companies	70.9	80.0	67.1	+12.9
Proposition 13 in California showed that taxes can be cut without cuts in services	52.9	70.0	30.0	+40.0
Corruption is common in my local government	87.7	91.5	82.6	+ 8.9
Corruption is common in my state government	89.8	90.4	87.1	+3.3
A graduated income tax is the best way for the state to raise money	68.3	88.5	77.6	+10.9
A sales tax is the best way for the state to raise money[c]	71.3	74.0	67.2	+6.8
The property tax is the best way for cities and towns to raise money for city services	46.7	39.4	46.5	-7.1
It's OK for property taxes to rise as fast as the cost of living	27.9	21.3	38.4	-17.1
State government should give more money to the cities and towns so local property taxes can be kept down	71.8	58.9	82.8	-23.9
Taxpayers in rich cities and towns should help pay for services in poorer cities and towns	50.8	39.4	62.8	-23.4
A cut in property taxes would benefit homeowners more than business and industry	50.2	51.1	44.2	+5.9
When property taxes go up, landlords just raise rents	89.1	87.2	90.8	-3.6
When business property taxes go up, businesses just raise their prices to consumers	88.3	90.5	87.4	+3.1

Table B-V (continued)

[a] Based on the question: "Now I'd like to get your opinions on tax and other government issues. For each statement I read, tell me whether you agree a lot, agree a little, disagree a little or disagree a lot with each statement. How much do you agree or disagree that________________."

[b] Each entry is the percentage of respondents who agree "a lot" or "a little" that the particular outcome will occur. Percentages are based on those responding to the question.

[c] This question was asked of only a subsample of 188 respondents.

Table B-VI

PREFERRED METHOD OF FINANCING PUBLIC SERVICES--BOSTON[a,b]

By Vote on Proposition 2½

		Greater Share of Money Should Come From:				
Service Type	Keep Financing the Same	Local Property Taxes	State Income Taxes	State Sales Taxes	User Fees	Other Sources
MUNICIPAL SERVICES						
Police	20.2%	48.0%	22.6%	5.6%	1.6%	2.0%
Voted for Proposition 2 1/2	22.1	55.8	16.8	3.2	1.0	1.0
Voted against	21.8	42.5	28.7	4.6	0.0	2.3
Local Public Parks & Recreation	18.0	47.8	13.9	9.0	10.2	1.2
Voted for Proposition 2 1/2	21.1	45.3	12.6	8.4	12.6	0.0
Voted against	17.9	52.4	15.5	9.5	2.4	2.4
Support of Local Public Transportation	8.6	15.6	30.7	14.3	27.5	3.3
Voted for Proposition 2 1/2	7.4	11.7	24.5	19.2	34.0	3.2
Voted against	5.9	15.3	34.1	11.8	29.4	3.5
LOCAL SCHOOL-RELATED SERVICES						
Public Elementary and High School Education	14.2	26.8	37.8	11.4	7.7	2.0
Voted for Proposition 2 1/2	11.7	31.9	35.1	10.6	10.6	0.0
Voted against	10.3	28.7	44.8	6.9	4.6	4.6
After School Programs such as Music and At	15.4	32.8	19.1	7.5	22.8	2.5
Voted for Proposition 2 1/2	16.7	31.1	13.3	6.7	31.1	1.1
Voted against	14.0	38.4	19.8	7.0	17.4	3.5
Special Education for Children With Learning Problems	13.1	13.9	51.8	13.1	6.5	1.6
Voted for Proposition 2 1/2	12.9	11.8	46.2	16.1	11.8	1.1
Voted against	12.8	16.3	57.0	9.3	2.3	2.3
Adult Education	16.1	14.1	24.0	5.8	37.2	2.9
Voted for Proposition 2 1/2	17.6	12.1	22.0	7.7	38.5	2.2
Voted against	16.5	14.1	25.9	7.1	32.9	3.5

(continued)

Table B-VI (continued)

PREFERRED METHOD OF FINANCING PUBLIC SERVICES—BOSTON[a,b]

By Vote on Proposition 2 1/2

		Greater Share of Money Should Come From:				
Service Type	Keep Financing the Same	Local Property Taxes	State Income Taxes	State Sales Taxes	User Fees	Other Sources
HUMAN RESOURCES SERVICES						
Mental Health Programs	15.3%	6.6%	54.1%	14.9%	6.6%	2.5%
Voted for Proposition 2 1/2	13.0	5.4	57.6	13.0	9.8	1.1
Voted against	15.5	3.6	57.1	16.7	3.6	3.6
State & Community Colleges & Universities	11.6	6.2	47.3	10.8	22.4	1.7
Voted for Proposition 2 1/2	11.8	6.4	38.7	10.8	31.2	1.1
Voted against	14.5	6.0	57.8	7.2	12.0	2.4

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[a] Based on the question: "For each service I read, would you like to keep the financing the way it now is or to see a greater share of the money come from local property taxes, from state income taxes, from state sales taxes, or a greater share from fees paid by users of the service?"

[b] Percentages are calculated for respondents who answered each question, and total to 100% across each row. Percentages are based on those responding to each question.

WHY VOTERS SUPPORT TAX LIMITATIONS:
EVIDENCE FROM MASSACHUSETTS' PROPOSITION 2½

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WHY VOTERS SUPPORT TAX LIMITATIONS: EVIDENCE FROM MASSACHUSETTS' PROPOSITION 2½

On November 4, 1980 Massachusetts voters followed California's lead by passing a stringent tax limitation measure. Commonly known as Proposition 2½, the measure severely restricts the ability of Massachusetts cities and towns to raise tax revenue for local public services. Cities and towns with high tax rates are required to reduce property tax levies by at least 15 percent per year until they reach the maximum allowable rate of 2½ percent communities with rates below that level are allowed to raise property taxes, but by no more than 2½ percent per year.

While high property taxes in Massachusetts set the stage for the passage of Proposition 2½, a variety of goals -- including but not limited to property tax reduction -- may have motivated individual voting behavior.[1] Support for property tax reduction, for example, may have been motivated by a desire to reduce service levels, to increase government efficiency, or to achieve tax reform in the sense of shifting away from local property taxes in favor of state sales or income taxes. Similarly, opposition to the tax limitation measure may have indicated satisfaction with existing service levels, the way government operates, or with the division of financing responsibilities among levels of government. In addition, some voters may have supported Proposition 2½ to improve their fiscal status relative to other groups and others may have opposed it to preserve their public sector jobs.

This paper uses data from a large statewide survey of Massachusetts residents to measure the relative importance of these motivations in influencing the overall statewide vote on Proposition 2½. The survey consisted of half-hour telephone interviews conducted by a professional survey firm during the two weeks following the vote and was based on a survey instrument that was written by the authors specifically for this purpose. The full sample includes 1,561 male and female household heads randomly selected from 58 Massachusetts cities and towns.[2] The sampling design assures that the 58 communities are representative of cities and towns throughout the state in terms of per capita property wealth, per capita expenditures, population, and percent of owner-occupied housing.[3]

Although based on a single state, the results reported here should be useful to policy makers in other states and researchers in other areas trying to understand the message of the nationwide "tax revolt." The Massachusetts experience is particularly enlightening for a number of reasons. First, a vigorous campaign together with thorough media coverage assured that residents were well informed both of the proposition's provisions and of the issues. This means that the case of Massachusetts is an appropriate setting for examining the link between voting behavior and complex public sector issues. Second, the absence of a state surplus meant that passage of Proposition 2½ would force state and local governments to make budget reductions immediately. This contrasts with the well-studied California situation where a large state surplus enabled people to believe that the tax limitation measure would not result in fewer public services. Third, the choice before the voters was clear-cut. Although the Massachusetts Teachers' Association had placed an alternative tax limitation measure on the ballot, it chose to campaign against Proposition 2½ rather than for its own proposal; with no organized support for the Association's proposal, its existence apparently played little role in the vote on Proposition 2½.[4] This situation is quite unlike the 1978 Michigan experience where the presence of alternatives and confusion about what would happen if two or more of the measures received majority support may have influenced voting behavior in a non-generalizable way.[5]

It should be noted that Massachusetts' Proposition 2½ is an initiative law rather than a constitutional amendment; once passed by the voters, it became a regular law subject to change by the legislature. Although this characteristic of Proposition 2½ should be borne in mind when interpreting the results of this study, the distinction between an initiative law and a constitutional amendment need not be overemphasized; state legislators are generally reluctant to undo what the majority of the voters support, particularly when the majority is large.[6]

The following section provides an overview of the voting model, Section II reports and interprets the results, and Section III summarizes the conclusions.

I. MODEL OVERVIEW

Proposition 2½'s main thrust is to roll back or limit the growth of property taxes in Massachusetts' 351 cities and towns.[7] Combined with the proposition's reduction in the motor vehicle excise tax, these provisions reduced local tax revenues by almost $500 million between fiscal years 1981 and 1982, or about 14 percent of 1981 tax revenues.[8] Proposition 2½ also removes fiscal autonomy of school committees, ends binding arbitration for police and fire personnel, prohibits the state from mandating programs without providing funds, and allows renters to deduct one-half of their rent payments from their state taxable income.[9]

Because it neither made explicit provision for new state aid to replace lost property taxes nor restricted the state government from raising state taxes, Proposition 2½'s impact on spending and taxes by level of government was uncertain at the time of the election. The impact on local spending of a fall in property taxes depended on the extent to which the state responded with new state aid. The impact on spending for state purposes depended on whether the new aid would be financed by higher state taxes or by lower state spending. In addition to uncertainty about spending levels, there was tremendous uncertainty about how spending changes would be allocated across functional categories and about the implications of spending changes for service levels.

The voting model for Proposition 2½ fully incorporates this wide range of potential effects and the uncertainty associated with them.

As Table I indicates, the model addresses six issues that might motivate support for or opposition to the tax limitation measure: service levels, inefficiency and waste, spending and taxes, tax reform, relative fiscal status, and public sector job status. For each of the first four, the model includes variables capturing voters' preferences, perceptions, or attitudes (column 2) and their expectations about what Proposition 2½ would accomplish (column 3). The former represent voters' desired changes in service or spending levels, government operations, and financing arrangements, regardless of Proposition 2½. The latter reflect voters' expectations about Proposition 2½'s impacts on the behavior of state and local governments and on the services consumed and the taxes paid by their households.

Relative fiscal status and public employee job status represent two additional aspects of self-interest that might motivate support or opposition to Proposition 2½. In addition to caring about specific service or tax levels, voters may care about the relative size of the net benefits they receive from the public sector. The model controls for and tests this motivation with a set of variables representing respondents' perceptions of how they fare relative to other groups of taxpayers. Unfortunately, there is no comparable measure of expectations about how Proposition 2½ would alter the respondent's relative fiscal status. Inclusion of public sector job status identifies the self-interest of voters who oppose the proposition to preserve their jobs, income, or quality of work environment.[10]

The full model explaining the probability that a voter voted "yes" on Proposition 2½ includes 45 variables and is based on the responses of the 1,114 sample voters for whom complete information is available.[11,12] Both forms of the model -- a linear probability model estimated by ordinary least squares and a logit model estimated using maximum likelihood techniques -- yield similar results. The discussion that follows focuses on the results of the linear form because its coefficients are simpler to interpret and it allows a simpler approximation of the relative contribution of each of the six issues listed in Table I to the statewide vote on Proposition 2½.[13] Comparable results for the logit model are reported in the appendix.

Table I. OVERVIEW OF VOTING MODEL

Issues Motivating Voting Behavior (1)	Variables Preferences, Perceptions and Attitudes (2)	 Expectations about Effects of Proposition 2-1/2 (3)
1. Service levels	Preferences for clusters of services	Expected effects on clusters of services; expected effects on services used by respondent's household,
2. Inefficiency and waste (cost of public services)	Perceptions of inefficiency or waste - state government - local government - local public schools	Expectations of more responsible government, more efficiency in local government, more voter control over schools.
3. Spending and taxes	Desired spending and taxing by - state government - local government - local public schools	Expected effects on state and local taxes; expected effects on taxes paid by respondent's household.
4. Tax reform (tax shift)	Desired tax shifts. Attitudes toward taxes.	Expectations about state aid and about tax reform.
5. Relative fiscal status	Perceptions of how other groups fare relative to household.	- -
6. Public sector job status	- -	Public sector employee as proxy for fear of job loss or decline in quality of work environment.

Overall, the linear probability model does an excellent job of explaining the vote on Proposition 2½. The R^2 of 0.54 is high for linear probability models given the binary nature of the dependent variable. More importantly, using a cut-off probability of 0.5 to separate "yes" voters from "no" voters, the model correctly predicts 85 percent of the sample voters. This represents a substantial gain over the 51 percent that would be correctly predicted by chance or the 58 percent that would be correctly predicted by projecting a "yes" vote for everyone in the sample.[14]

II. EMPIRICAL RESULTS

The six issues identified in Table I as likely to influence voting behavior on Proposition 2½ provide the framework for presentation and interpretation of the model results. For each issue, we first report the coefficients of the relevant variables. These coefficients show how preferences and expectations about the particular issue influenced the probability that an individual would vote for or against Proposition 2½, controlling for all other variables. We then present estimates of the impact of each specific view on the statewide vote for the proposition. Derived by weighting the marginal impacts from the estimated equation by the sample distribution of each variable, these "weighted impacts" show the difference between the actual percentage of respondents who voted in favor of Proposition 2½ and what the statewide vote of household heads would have been had voters neither wanted nor expected any change in each specific variable.[15]

Service Levels

Like other surveys of voters' preferences for public services at the time of tax limitation votes, this study finds that a majority of Massachusetts voters wanted to maintain or increase the levels of most state and locally provided public services.[16] This does not rule out the possibility, however, that a substantial minority voted for tax limitation with the explicit goal of either reducing overall services or of reducing the levels of particular services.

To examine this possibility, preference and expectations variables were defined for each of the following five clusters of public services:[17]

- Education and recreation: includes public elementary and secondary education, after school programs such as music and athletics, adult education, and local parks and recreation.

- Public safety: includes police and fire-fighting services.

- Sanitation and street maintenance: includes garbage collection and street and sidewalk repairs.

- Human services: includes special education for children with learning problems, mental health programs, and services for the elderly.

- Welfare: welfare and other public assistance.[18]

Beyond reducing the number of separate services in the model to a manageable level, clustering also averages out the random errors associated with responses to a single item. The clusters nonetheless provide sufficient detail to isolate how views toward different types of services influenced the vote on Proposition 2½.

For each cluster of services, preference variables were constructed by taking the mean response across items to a question about whether respondents would like a particular service cut back a lot, cut back a little, kept the same, increased a little or increased a lot.[19] The service level expectations variables are similarly constructed with the scale representing respondents' views on whether Proposition 2½ will lead to a lot less or a little less, the same amount, a little more or a lot more of each public service. The five-point scales for preferences and expectations are treated as if they were interval scales. With respect to expectations, however, it is reasonable to suppose that voters might have viewed the difference between services that would be cut "a lot" and those that would be cut "a little" (i.e., the difference between a 1 and a 2 on the scale) as larger than the difference between services that would be cut "a little" and those that would be kept the same (i.e., the difference between a 2 and a 3). Statistical tests provided support for a logarithmic specification for all the service expectations variables except welfare, for which the linear form was preferred.[20]

As Table II indicates, four of the five preference variables have negative coefficients. This finding supports the view that, for most types of services, respondents who prefer service cutbacks are more likely to support Proposition 2½ than those who prefer the same or higher service levels. The clusters of locally provided services, i.e., education and recreation and public safety, exhibit the greatest effects. The desire to reduce education and recreation services a little (a lot), for example, increases the probability that a voter will support Proposition 2½ by four (eight) percentage points compared to the desire to maintain services at their current level.

Although state and federal taxes fully finance welfare in Massachusetts, many people expected Proposition 2½ to lead to welfare reductions. For some voters, this expectation may have reflected the incorrect belief that welfare is financed in part by local property taxes; for others it may have reflected the belief that the money for new state aid would come from existing public assistance programs. These views help to explain why the desire for less welfare assistance increases the probability of support for Proposition 2½ even though its provisions apply only to local taxes.

Surprisingly, preferences for human services have a positive, though statistically insignificant, coefficient, suggesting that voters who wanted to increase human services may have been more likely to support Proposition 2½ that those who did not. This finding is hard to explain. Both state and local governments finance and deliver human services in Massachusetts. It is possible, however, that voters wanting to increase human services supported Proposition 2½ in the

Table II. SERVICE LEVELS

Estimated Coefficients and Impacts on Probability of a "Yes" Vote[a]

Variable	Form[b]	Coefficient (Absolute value of t-statistic)	Effect on Probability of a "Yes" Vote of Expectation that Services Will be Cut Back:[c]	
			a little	a lot
Preferences				
Education and Recreation	Linear (1-5)	-0.040 (2.01)		
Public Safety	Linear (1-5)	-0.027 (1.57)		
Sanitation and	Linear (1-5)	-0.004 (0.22)		
Human Services	Linear (1-5)	0.024 (1.39)		
Welfare	Linear (1 5)	-0.023 (2.10)		
Expectations				
Education and Recreation	Ln(1-5)	0.151 (3.02)	-0.061	-0.166
Public Safety	Ln(1-5)	0.124 (2.98)	-0.051	-0.136
Sanitation and Street Repair	Ln(1-5)	0.041 (1.01)	-0.017	-0.045
Human Services	Ln(1-5)	0.119 (2.64)	-0.048	-0.131
Welfare	Linear (1-5)	-0.043 (3.12)	0.043	0.086
Total Community Services	Ln(1-5)	0.124 (3.81)	-0.050	-0.136
Services Used by Household	Ln(1-5)	0.031 (0.82)	-0.013	-0.034

---

[a] Based on the full model of voting behavior, which includes 45 independent variables and was estimated by ordinary least squares. The dependent variable is "1" if the respondent voted "yes" on Proposition 2½ and "0" if he or she voted "no."

[b] The preference and expectations scales are decrease a lot (1); decrease a little (2); no change (3); increase a little (4); and increase a lot (5). "Ln" signifies that the variable is expressed as a natural logarithm.

[c] Compared to the expectation that services will not change.

hope that a tax structure less dependent on local property taxes would be better suited to providing these services.

Comparison of the upper and lower sections of Table II reveals that expectations about the impacts of Proposition 2½ on service levels influence voting behavior even more strongly than preferences. The positive signs of the first four service clusters -- education and recreation, public safety, sanitation and street repairs, and human services -- indicate that people expecting the measure to lead to cutbacks in these services were more likely to vote against the proposition than those who expected no change. The logarithmic specification for these four clusters captures the non-linear relationship between the expectations scale and the probability of voting yes. As the lower right section of Table II shows, the logarithmic form implies that expectations of large service cutbacks have more than twice the impact on the probability of voting "yes" on Proposition 2½ than expectations of small cutbacks.

In contrast to the first four service clusters, expectations about welfare services enter the model linearly and have a negative sign. The coefficient of -0.043 implies that voters who expected welfare to be cut back a little (a lot) are 4.3 (8.6) percentage points more likely to support Proposition 2½ than those who expected no change. We interpret this result to mean that voters, on average, viewed expected reductions in welfare as a desirable outcome of the tax limitation measure.[21]

To capture all possible service-related effects, the model also includes respondents' expectations about how Proposition 2½ would affect overall service levels in their particular community as well as specific services directly used by their households. The positive and statistically significant coefficient for expectations about overall community services signifies that this variable exerts an independent influence on voting behavior; the larger the cutbacks expected, the lower the probability of a favorable vote. The small and statistically insignificant coefficient of the other variable, however, implies that voters' concerns about the impact of

Proposition 2½ on the services directly used by their households are already captured by the service cluster variables.

The results reported so far relate to individual behavior; the estimated impacts of these service-related views on the statewide vote for Proposition 2½ are reported in Table III. Each "weighted impact" is the sum of the estimated effects on the probability of a "yes" vote weighted by the proportion of sample respondents in each response category. In each case, the implicit comparison is to a base case of "no change" in either a preference or an expectations variable (a value of 3 on the 5-point scale).[22]

The results are striking. On net, preferences and expectations about all the service clusters other than welfare decreased the favorable vote on Proposition 2½ compared to what the voting outcome would have been had voters neither wanted nor expected changes in service levels. In addition, expectations of changes in services influenced the vote more strongly than preferences. Typically, the net effects result from small positive contributions to the favorable vote from people who desire fewer services or who expect more (shown in the "for" column) and larger negative contributions from people desiring more services or who expect fewer (shown in the "against" column). Views toward local education and recreation have the biggest impact of any cluster of services. These views reduce the overall favorable state vote by close to 7 percentage points. Taken together, the net effect of all service variables other that welfare is to reduce the favorable vote on Proposition 2½ by 18.3 percentage points.[23]

These results for all services other than welfare reflect the fact that voters on average desired higher service levels but expected Proposition 2½ to reduce them. As Table IV demonstrates, the percent of voters wanting cutbacks in particular service areas is substantially less than the percent expecting cutbacks.

Table III. PUBLIC SERVICES

PREFERENCES AND EXPECTATIONS

Weighted Impacts on Total Vote[a]

Variable	Weighted Impacts on Total Vote		
	For	Against	Net
Education and Recreation			
Preferences for less	0.008		
-- for more		-0.015	
Expectations of less		-0.061	
-- of more	0.001		
			-0.067
Public Safety			
Preferences for less	0.003[b]		
-- for more		-0.009[b]	
Expectations of less		-0.029	
-- of more	0.001		
			-0.034
Sanitation and Street Repair			
Preferences for less	0.001[b]		
-- for more		-0.001[b]	
Expectations of less		-0.011[b]	
-- of more	0.000[b]		
			-0.011
Human Services			
Preferences for less		-0.002[b]	
-- for more	0.017[b]		
Expectations of less		-0.034	
-- of more	0.002		
			-0.017
Welfare			
Preferences for less	0.020		
-- for more		-0.004	
Expectations of less	0.037		
-- of more		-0.002	
			0.051
Total Community Services			
Expectations of less		-0.056	
-- of more	0.002		
			-0.054
Services Used by Household			
Expectations of less		-0.008[b]	
-- of more	0.000[b]		
			-0.008

[a] Each entry is the difference between the actual statewide vote of household heads for Proposition 2½ and the predicted vote had no household head wanted or expected the specified change in service levels.

[b] Based on a coefficient that is not statistically significant at the 5 percent one-tailed level.

Table IV. PUBLIC SERVICES

DISTRIBUTION OF PREFERENCES AND EXPECTATIONS[a]

Variable	Mean Response	Percent Wanting Decrease	Percent Expecting Decrease
Education and Recreation			
Preferences	3.17	31%	--
Expectations	2.12	--	87%
Police and Fire			
Preferences	3.19	13	--
Expectations	2.50	--	48
Street Repairs and Garbage Collection			
Preferences	3.17	17	--
Expectations	2.37	--	64
Human Services			
Preferences	3.61	12	--
Expectations	2.41	--	70
Welfare			
Preferences	2.32	57	--
Expectations	2.18	--	65
Overall Community Services			
Expectations	2.10	--	72
Services used by the respondent's household			
Expectations	2.33	--	49

---

[a] Based on 1114 respondents who voted on Proposition 2½. The preference and expectations scales are decrease a lot (1); decrease a little (2); no change (3); increase a little (4); and increase a lot (5).

Welfare stands out as the only service that more than half the voters wanted to see reduced. As noted above, it is also the only service for which the expectations variable has a negative sign in the voting model. These factors together imply that attitudes toward welfare contribute 5.4 percentage points to the favorable vote on Proposition 2½.

Inefficiency and Waste

Massachusetts voters believe that both their state and local governments deliver public services inefficiently. Over 80 percent of the voting model sample believe, for example, that spending by each level of government could be reduced by five percent or more without reducing the quality or quantity of services provided. As reported elsewhere, 73 percent of the total sample of voters and non-voters believe state spending could be cut 15 percent or more, and 60 percent believe that local spending could be similarly cut, without service reductions. In addition, 88 percent of these respondents think corruption is common in state government while 63 percent believe that corruption is common in their particular local government. In response to two other questions related to the cost of providing local public services, 47 percent agree with the statement that "city or town employees are overpaid" and 67 percent agree that "local public employees do not work as hard as employees of private companies."[24]

The results of the voting model suggest that, controlling for other preferences, expectations, and attitudes, such perceptions of inefficiency and waste in public service delivery influence the vote on Proposition 2½ somewhat, but that expectations about the measure's ability to alter the way government operates are a more powerful set of explanatory variables. Those believing that the tax limitation measure would make government more efficient and responsible are thus much more likely to support Proposition 2½ than those less optimistic in this regard.

Starting with perceptions and attitudes, the model includes five variables to capture voters' views about the extent of government waste and inefficiency. Four of these are dummy variables that take on the value 1 if the respondent thinks state, local, school, or welfare spending can be reduced by five percent or more without service cutbacks.[25] Because school spending is such a large proportion of local budgets and welfare spending of the state budget, each is included as a separate spending category. Controlling for perceptions about school and welfare inefficiency in this way implies that the local inefficiency variable can be interpreted as local non-school inefficiency and the state government inefficiency variable as non-welfare state government inefficiency. The fifth variable measuring perceptions of inefficiency and waste is the respondent's extent of agreement with statements that local government employees are overpaid and that they work less hard than private sector employees. The higher the average response in the range 1 to 4, the more strongly the respondent agrees that the wage costs of locally provided public services are excessively high. The data presented in Table V show that only two of these five variables are statistically significant. In particular, respondents who believe that school services are inefficiently provided or who believe that wage costs are too high are more likely than others to support Proposition 2½.[26]

In contrast, all three expectations variables are statistically significant and have large positive coefficients. Voters who expect Proposition 2½ to make local government more efficient are 12.9 percentage points more likely to vote for the measure than those who are less optimistic about efficiency gains. Similarly, the belief that the most important effect of Proposition 2½ will be to make government more responsible and efficient or less corrupt increases the probability of a "yes" vote by 9.6 percentage points. Moreover, the belief that Proposition 2½ will increase voter control over school spending raises the probability of a "yes" vote by 12.9 percentage points. The additive form of the model implies that, controlling for other variables, these three expectations alone raise the probability of supporting Proposition 2½ by 35 percentage points.

Table V. INEFFICIENCY AND WASTE

Estimated Coefficients and Weighted Impacts on Total Vote[a]

Variable	Form	Coefficient (Absolute value of t-statistic)	Weighted Impact on Total Vote		
			For	Against	Net
Perceptions of Inefficiency in:					
local government	0-1	-0.002 (0.05)		-0.002[b]	
state government	0-1	0.039 (1.03)	0.034[b]		
local schools	0-1	0.050 (2.01)	0.031		
welfare spending	0-1	0.018 (0.58)	0.015[b]		
Attitude					
Local government employees are overpaid and do not work hard	Linear (1-4)[c]	0.057 (4.23)	0.026	-0.015	
Expectations					
More efficiency in local government	0-1	0.129 (4.89)	0.084		
More efficient, responsible, or less corrupt government (single most important impact)	0-1	0.096 (3.638)	0.021		
More local voter control over school spending		0.129 (5.122)	0.090		
				0.284	

---

[a] Based on the full model of voting behavior which includes 45 independent variables and was estimated by ordinary least squares. The dependent variable is "1" if the respondent voted "yes" on Proposition 2½ and "0" if he or she voted "no." The weighted impacts are the difference between the actual statewide vote of household heads for Proposition 2½ and the predicted vote had no household head perceived inefficiency or expected Proposition 2½ to make government more efficient.

[b] Based on a coefficient that is not statistically significant at the 5 percent one-tailed level.

[c] The base for the calculation of weighted impacts is a value of 2.5.

The weighted effects of the inefficiency variables, also presented in Table V, indicate the contribution of each variable to the overall state vote. Each weighted impact starts from a base case in which the respondent perceives little or no inefficiency in government (a value of zero for each perception variable), neither agrees nor disagrees that local government employees are overpaid or do not work hard (a value of 2.5 for the attitude variable), and expects no change in the way government operates (a value of zero for each expectation variable).

Unmistakably, these perceptions, attitudes, and expectations about government inefficiency and waste make a substantial contribution to the statewide vote in favor of Proposition 2½. Most of the weighted effects are large and positive, the largest being the eight and nine percentage point impacts of the expectation that the measure would produce more efficiency in local government and allow more voter control over school spending. The net additive contribution to the statewide vote of all these beliefs and expectations is about 28 percentage points, a large contribution compared to the sample favorable vote of 58 percent.

Spending and Taxes

Sample voters are much more likely to prefer lower spending and taxes than to prefer fewer services. The fraction of voters desiring spending reductions in state government, for example, is 65 percent *vs.* 42 percent preferring service reductions. The comparable percentages for local government spending and service reductions are 59 and 22 percent; and for school spending and services, 47 and 18 percent. Beliefs that government spending can be cut without reducing the quality and quantity of services help reconcile these differences, but they do not explain them fully. The question here is the extent to which voters' preferences for lower spending and taxes influence the vote on Proposition 2½, controlling for preferences for service levels and perceptions of government inefficiency and waste.

The three spending reduction variables, shown in the first three rows of Table VI, all have positive coefficients and make small contributions to the overall statewide favorable vote on Proposition 2½; only the school spending coefficient, however, is statistically significant.[27] Although the desire to decrease school spending increases the favorable vote by 2.3 percentage points, fear of lower school spending -- measured by a dummy variable representing the expectation that Proposition 2½ would lead to a decrease in school funds -- reduces the favorable statewide vote by 4 percentage points. On net, concern about decreased school spending thus outweighs the desire for that spending outcome in terms of its influence on the Proposition 2½ vote.

Instead of asking respondents directly about what they expected to happen to state and local government spending, the questionnaire elicited respondents' expectations about how Proposition 2½ would affect the major local tax (the property tax), and the two major state taxes (sales and income taxes). The results shown in Table VI indicate that the expectation of lower property taxes increases the probability of a "yes" vote by 13 percentage points, with a large weighted effect on the overall vote of 10.6 percentage points. The possibility that the state government might raise state taxes to offset the local revenue losses from the measure, however, was viewed as an undesirable outcome as shown by the fact that the expectation of higher state income or sales taxes enters the probability model with a negative sign and exerts a weighted impact of 6.3 percentage points against the proposition.

The final tax variable, respondents' expectations about the impact of Proposition 2½ on household taxes, enters the voting model strongly with the predicted negative sign. The preferred logarithmic specification implies that expectations that household taxes would decrease "a lot" (a value of 1 on the five-point scale) has more than twice the effect on the probability of a "yes" vote than expectations that household taxes would decrease "a little" (a value of 2), rela-

Table VI. SPENDING AND TAXES

Estimated Coefficients and Weighted Impact on Total Vote[a]

Variable	Form	Coefficient (t-statistic)[c]	Weighted Impact on Total Vote		
			For	Against	Net
Want lower spending and taxes					
-- state government	0-1	0.028 (1.13)	0.018[b]		
-- local government	0-1	0.021 (0.83)	0.012[b]		
-- local schools	0-1	0.049 (1.96)	0.023		
Expect decrease in school funds	0-1	-0.060 (2.55)		-0.041	
Expect lower property taxes	0-1	0.131 (4.50)	0.106		
Expect higher state taxes	0-1	-0.079 (2.93)		-0.063	
Expect lower household taxes	Ln(1-5)[d]	-0.112 (4.14)	0.031	-0.007	
			0.190	-0.111	0.079

---

[a] Based on the full model of voting behavior which includes 45 independent variables and was estimated by ordinary least squares. The dependent variable is "1" if the respondent voted "yes" on Proposition 2½ and "0" if he or she voted "no." The weighted impacts are the difference between the actual statewide vote of household heads for Proposition 2½ and the predicted vote had no household head wanted or expected lower spending or taxes.

[b] Based on a coefficient that is not statistically significant at the 5 percent one-tailed level.

[c] t-statistics are in absolute-value form.

[d] "Ln" signifies that the variable is specified as a natural logarithm.

tive to the expectation of no change (a value of 3). The weighted impacts indicate that expectations of lower household taxes contribute 3.1 percentage points to the favorable vote, while the less common expectation of higher taxes contributes a slight 0.7 percentage points against the vote.

In sum, compared to a base case of no desired or expected changes in spending and taxes, the desire for or expectation of lower spending or taxes contributes 19 percentage points to the favorable statewide vote on Proposition 2½, while fears of higher state taxes or lower school spending reduce the favorable vote by 11 percentage points.

Tax Reform

The above discussion treats tax reform only in the sense of property tax or overall tax reduction. In this section, tax reform is defined as a shift away from reliance on the property tax to alternative taxes or fees, controlling for the level of government spending.

The four desired tax shift variables in the voting model are based on a series of questions of the form: "For each service I read, would you like to keep the financing the way it is now or see a greater share of the money come from local property taxes, from state income taxes, from sales taxes, or a greater share from fees paid by the users of the service?" The shift variables include:

SHIFT1 = 1 if respondent wants more state (sales or income tax) financing of elementary and secondary education, and 0 otherwise.

SHIFT2 = 1 if respondent wants more state (sales or income tax) financing of special education, and 0 otherwise.

SHIFT3 = Sum of responses indicating a desired shift to state income or sales taxes for police, parks, or after school programs, divided by the number of these services for which an answer was given. (Range is 0 to 1).

SHIFT4 = Sum of responses indicating a desired shift to user charges for local transportation, adult education, and after school programs, divided by the number of these services for which an answer was given. (Range is 0 to 1.)

Table VII shows that SHIFT1, which captures the desire for more state financing of education, enters the voting model with a positive and statistically significant coefficient of 0.047. Compared to the base case of no desire to place heavier reliance on state taxes, however, these preferences contribute only about 1.6 percentage points to the statewide favorable vote on Proposition 2½. The desire to rely more heavily on user charge financing plays a similar role in the overall vote, contributing about 1.5 percentage points. The coefficients for the other two SHIFT variables are small and insignificant. Although this minimal impact is not surprising for SHIFT3, the results for SHIFT2 refute the hypothesis that dissatisfaction with the financing of special education played an important role in the Proposition 2½ vote.

Two additional attitude variables help represent respondents' views on tax reform. The first, a dummy variable that takes on the value 1 if the respondent believes the state should provide more aid to cities and towns to keep property taxes down, enters the voting model with a small negative and statistically insignificant coefficient. The second is a cluster of responses to two questions measuring respondents' attitudes toward redistributive taxes and state aid. The higher the average response (on a four-point scale), the more the respondent supports graduated income taxes or equalizing aid programs. The cluster's negative coefficient implies that those who favor using the state-local public sector to achieve redistributive goals are more likely to vote against the proposition. Presumably, these voters believe Proposition 2½ will obstruct, rather than facilitate, the redistributive tax reform they desire. Compared to a base of no opinion on this issue (a value of 2.5 on the four-point scale), the weighted impact of the desire for more redistributive taxes and aid decreases the statewide favorable vote by 0.9 percentage points; this is exactly offset, however, by the impact of

Table VII. TAX REFORM

Estimated Coefficients and Weighted Impact on Total Vote[a]

Variable	Form	Coefficient (Absolute value of t-statistic)	Weighted Impact on Total Vote		
			For	Against	Net
Desired Shifts					
SHIFT1: Shift of education to state taxes	0-1	0.047 (1.93)	0.016		
SHIFT2: Shift of special education to state taxes	0-1	0.009 (0.39)	0.005[b]		
SHIFT3: Shift of other local services to state taxes	0-1[c]	-0.019 (0.46)		-0.004[b]	
SHIFT4: Shift of certain services to user charges	0-1[c]	0.053 (1.53)	0.015[b]		
Attitudes					
State should give more aid to reduce property taxes	0-1	-0.013 (0.51)		-0.010[b]	
Support for redistributive taxes and aid	Linear (1-4)	-0.025 (1.83)	0.009	-0.009	
Expectations					
Tax reform	0-1	0.057 (1.96)	0.046		
More state aid	0-1	0.024 (1.10)	0.010[b]		
			0.101	-0.023	0.078

---

[a] Based on the full model of voting behavior which includes 45 independent variables and was estimated by ordinary least squares. The dependent variable is "1" if the respondent voted "yes" on Proposition 2½ and "0" if he or she voted "no." The weighted impacts are the difference between the actual statewide vote of household heads for Proposition 2½ and the predicted vote had no household head wanted or expected tax reform or a shift in the financing of public services.

[b] Based on a coefficient that is not statistically significant at the 5 percent one-tailed level.

[c] Continuous variable with range 0 to 1.

Proposition 2½ supporters who oppose redistributive fiscal reform.

Expectations of a tax shift are difficult to isolate from expectations of tax reduction. In both cases, for example, people would expect Proposition 2½ to lead to lower property taxes. If respondents preferred shifting burdens away from property taxes onto state taxes, however, the expectation of higher state taxes would increase the probability of a "yes" vote on Proposition 2½. Thus, the finding reported above that this expectations variable has a negative coefficient suggests that voters are more concerned with tax reduction than with actual tax reform.

In an attempt to incorporate more directly respondents' expectations about tax shifts, the model includes a dummy variable that takes on the value 1 if the voter expected Proposition 2½ to "encourage the state legislature to reform Massachusetts taxes," and 0 otherwise. Expecting tax reform increases the probability of a "yes" vote by 5.7 percentage points compared to not expecting reform. Moreover, because so many respondents expected tax reform, the weighted impact of this variable is relatively large. Unfortunately, however, the possibility that this variable represents expectations of overall tax reduction rather than of a tax shift cannot be ruled out since "tax reform" means different things to different people.

Another approach to the tax shift issue is through respondents' expectations of new state aid. Aside from state takeover of local expenditure responsibilities or legislation enabling local communities to use non-property taxes, a tax shift can only occur if new state aid financed by state taxes replaces lost property tax revenues. This logic justifies interpreting a variable that takes on the value 1 if the respondent expects Proposition 2½ to lead to more state aid and 0 otherwise as an indicator that the respondent expects tax reform. The variable makes a small positive, but statistically insignificant, contribution to the statewide favorable vote on Proposition 2½.

To summarize, attitudes and expectations about tax reform in the sense of tax shift contribute an estimated 5.5 to 10.1 percentage points to the statewide favorable vote on Proposition 2½, depending on how one interprets the variable for expectations of "tax reform." The desire for redistributive tax reform, however, works in the opposite direction: those who desire such reform are more likely to vote against the tax limitation measure.

Relative Fiscal Status

To what extent were voters motivated by the desire to improve or preserve the fiscal position of their households relative to that of other groups? To isolate this motivation, the model includes a set of variables representing respondents' views about their households' fiscal position relative to business firms, poor households, and minority households at the time of the vote, and perceptions of changes in relative status during the previous two years. Each current-status variable takes on the value of 1 if the respondent believes that the other group receives more public services in relation to taxes paid than his or her household, and 0 otherwise. Each change-in-status variable takes on the value of 1 if the respondent believes the fiscal status of the other group has improved relative to that of his or her household over the past two years. The weighted impacts of these six variables, reported in Table VIII, start from a baseline belief that the respondent's household is fiscally as well off as each of the other groups and that the relative positions have not been changing over time.[28]

Of particular interest are the change variables, all of which are statistically significant at the five percent level for all three categories. The belief that business firms have been improving their fiscal status relative to the respondent's household increases the probability of a "yes" vote by 4 percentage points and contributes 1.8 percentage points to the overall favorable vote in Proposition 2½. Thus, while concern about the shift of taxes away from business firms onto individuals motivated some support for the tax limitation measure,

Table VIII. RELATIVE FISCAL STATUS

Estimated Coefficients and Weighted Impacts on Total Vote[a]

Variable	Form	Coefficient (t-statistics)[c]	Weighted Impact on Total Vote		
			For	Against	Net
Perception of fiscal position relative to that of respondent's household					
Business firms are better off					
--today	0-1	-0.030 (1.34)		-0.018[b]	
--compared to 2 2 years ago	0-1	0.041 (1.77)	0.018		
Poor households are better off					
--today	0-1	0.015 (0.56)	0.007[b]		
--compared to 2 years ago	0-1	0.071 (2.18)	0.015		
Minority households are better off					
--today	0-1	0.035 (1.27)	0.018[b]		
--compared to 2 years ago	0-1	-0.055 (1.88)		-0.019	
			0.058	-0.037	0.021

---

[a] Based on the full model of voting behavior which includes 45 independent variables and was estimated by ordinary least squares. The dependent variable is "1" if the respondent voted "yes" on Proposition 2½ and "0" if he or she voted "no." The weighted impacts are the difference between the actual statewide vote of household heads for Proposition 2½ and the predicted vote had no household head perceived other groups were fiscally better off or had become better off relative to the respondent's household during the past two years.

[b] Based on a coefficient that is not statistically significant at the 5 percent one-tailed level.

[c] t-statistics are in absolute value form.

the overall impact of this attitude on voting behavior appears to be small.

The coefficients for beliefs about the changing relative position of poor families and minorities are intriguing because they differ in sign. The view that poor households have been gaining relative to the respondent's household increases the probability of a "yes" vote on Proposition 2½ by 7.1 percentage points while the comparable view about minorities decreases the probability by 5.5 percentage points. These results suggest that respondents disapprove of perceived fiscal gains among poor households at a time when their own income outlook is uncertain. At the same time, however, gains among minority households are apparently viewed as an appropriate outcome of public sector activity that tax limitation measures should not restrict. Because a smaller proportion of the sample respondents perceive fiscal gains for the poor than perceive gains for minorities, the positive weighted impact on the statewide vote of attitudes toward the poor is somewhat smaller than the negative impact of attitudes towards minorities.

The signs of the variables representing respondents' views of their current relative status complicate the net impact of voter attitudes toward other groups. The belief that poor or minority households are fiscally better off than the respondent's household leads to support for a change and, hence, for tax limitation. Neither coefficient, however, is statistically significant at the five percent level. One possible interpretation of the negative (but insignificant) sign of the variable representing perceptions about the current fiscal position of business is that voters who consider business taxes to be high in relation to services received (a low value of the variable) are more likely than others to support Proposition 2½ and its promise of overall tax reduction. This interpretation is consistent with one of the campaign arguments used by the proposition's advocates. It also conforms to the finding that 74 percent of the total sample (voters and non-voters) agreed with the statement that Proposition 2½ would attract more business and industry to Massachusetts.[29] It should be noted, however, that the variable actually expresses perceptions of the fiscal position of Massachusetts firms relative to the respondent's household rather than firms in other states.

Beliefs that business firms and poor households have improved their relative fiscal positions during the previous two years and that poor families and minorities receive greater net benefits from the public sector spending than the respondent's household thus contribute about 5.8 percentage points to the statewide favorable vote on Proposition 2½. On the other hand, the view that firms are relatively well off today and that minority households are better off than two years ago contributed 3.7 percentage points to the overall vote against the proposition.

Public Sector Job Status

As shown in Table IX, the estimated equation implies that employment in the local public sector reduces the probability of a "yes" vote on Proposition 2½ by 12 percentage points, while employment in either state government or local public schools reduces the probability by about 7 percentage points. Since the equation controls for preferred levels of and expectations about public services, taxes, and spending, these effects are relatively large and suggest that concern among local public employees about income reduction or morale loss strongly influenced their votes. The weighted effects on the overall vote are small, however, because only a small proportion of all Massachusetts households have a public sector employee.

III. SUMMARY AND CONCLUSIONS

Table X combines the preceding findings to present a complete picture of the relative importance of the six issues motivating the Proposition 2½ vote, based on the concept of weighted impacts. The first line estimate indicates what the voting outcome would have been had voters neither wanted nor expected changes in the level and distribution of public services and taxes, neither perceived governmental inefficiency nor expected Proposition 2½ to lead to more efficient or

Table IX. PUBLIC SECTOR JOB STATUS

Estimated Coefficients and Weighted Impacts on Total Vote[a]

Variable	Form	Coefficient (t-statistic)[c]	Weighted Impact on Total Vote		
			For	Against	Net
State government employee	0-1	-0.076 (1.30)		-0.003[b]	
Local government employee	0-1	-0.121 (3.06)		-0.010	
Local school employee	0-1	-0.072 (1.69)		-0.005	
				-0.018	-0.018

[a] Based on the full model of voting behavior which includes 45 independent variables and was estimated by ordinary least squares. The dependent variable is "1" if the respondent voted "yes" on Proposition 2½ and "0" if he or she voted "no." The weighted impacts are the difference between the actual statewide vote of household heads for Proposition 2½ and the predicted vote had no household head lived in a household with an employee working in the state or local public sector.

[b] Based on the coefficient that is not statistically significant at the 5 percent one-tailed level.

[c] t-statistics are in absolute-value form.

Table X. SUMMARY OF WEIGHTED IMPACTS ON TOTAL VOTE

A. Assume all voters neither want nor expect any public sector changes and no household member works in the state and local public sector			
Base favorable vote			0.267
B. Issues increasing the favorable vote			
Inefficiency and waste in			
--local government	0.093		
--state government	0.070		
--local schools	0.121		
		0.284	
Lower taxes and spending			
--lower property taxes	0.106		
--other	0.084		
		0.190	
Tax reform (net)		0.078	
Desire for lower public services (not welfare)[a]		0.010	
Lower welfare		0.057	
Relative fiscal status (net)		0.021	
Total additions to favorable vote			0.640
C. Issues decreasing the favorable vote			
Fear of service loss[b]			
--education	-0.075		
--other[c]	-0.132		
		-0.207	
Fear of lower school funding		-0.040	
Fear of higher taxes			
--state taxes	-0.060		
--taxes paid by household	-0.007		
		-0.067	
Fear of loss of job security among public sector employees		-0.018	
Total subtractions from favorable vote			-0.332
Overall total			0.575

---

[a] This nets out the anomalous, but statistically insignificant, 0.002 negative impact on the favorable vote contributed by those who want to decrease human services.

[b] Net of the small effects of expected service increases.

[c] This nets out the anomalous, but statistically insignificant, 0.017 impact on the favorable vote contributed by those who want to increase human services.

responsible government, and had no direct stake in the state-local public sector through a household member's employment in that sector. Under these assumptions, only about one quarter (26.7 percent) of Massachusetts household heads would have supported the tax limitation measure. In other words, most people would not have voted for change simply for the sake of change.

Among the factors leading to increases in the favorable vote, views toward inefficiency and waste in government are the most important. Included in these views are the effects not only of perceptions of existing inefficiency but also of expectations that Proposition 2½ would improve the situation, with the latter playing the larger role. The 28.4 percentage point contribution of these views alone is large enough to turn the estimated 26.7 percent base favorable vote into majority support for Proposition 2½. The proposition's orientation toward local, rather than state, government is reflected in the distribution of these effects by level of government; despite the finding that voters believe state government is less efficient than local government, views about inefficiency in state government contribute less to the favorable vote than do similar views about the operation of local government and public schools.

Preferences for and expectations of lower taxes and spending contribute another 19.0 percentage points to the favorable vote. Since more than half of this contribution reflects the expectation of lower property taxes, this might be interpreted as a tax reform effect. Tax reform in the sense of tax shift rather than reduction, however, adds another estimated 7.8 percentage points to the favorable vote. Overall, the model implies that concerns about the level and composition of taxes increase the "yes" vote on Proposition 2½ by 26.8 percentage points.

In contrast to these large effects related to inefficiency and tax issues, the preference for lower levels of all services except welfare contributes only 1.0 percentage point to the favorable vote. This result clearly does not support the view that the success of Proposition 2½ represents a general demand for fewer public services.

Preferences for and expectations of lower welfare services, however, are estimated to increase the favorable vote by 5.7 percentage points. Finally, the desire to improve one's fiscal status relative to that of other groups also contributes 2.1 percentage points. Combining all of these factors leading to a favorable vote with the predicted base favorable vote of 26.7 percent yields a 90.7 percent statewide vote for Proposition 2½.

Other preferences and expectations, however, motivated voters to oppose the tax limitation measure. As Table X indicates, fear of service loss is the most important cause of a "no" vote. Of this 20.9 percentage point impact, 7.5 points represent concern about reductions in education (and recreation) services. Combining this with evidence of concern about reduced education funding, fear of Proposition 2½'s adverse impact on local public schools reduces the favorable vote by 11.5 percentage points. The belief that Proposition 2½ would lead to higher state taxes or higher taxes for the respondent's household contributes another 6.1 percentage points to the negative vote, while concern about the impact on public sector jobs adds 1.8 percentage points. Subtracting the sum of these negative effects from the predicted 90.7 favorable vote yields the sample of 57.5 percent in favor of Proposition 2½.

Thus, the survey results clearly indicate that the vote for Proposition 2½ was much more an attempt to obtain lower taxes and more efficient government than to reduce the level of public services. This conclusion is remarkably consistent with those from other states. From a survey-based analysis of the vote on Michigan's successful 1978 Headlee Amendment limiting state taxes, for example, Courant, Gramlich and Rubinfeld conclude that:

> . . . 3 out of 4 voters responsible for the plurality of the Headlee Amendment were motivated by a desire for either efficiency gains or a free lunch. Only one out of 4 appears to favor a smaller-sized public sector where both spending and taxes are reduced.[30]

Using survey data gathered just before the 1978 vote on California's property tax limitation measure, Proposition 13, Jack Citrin also draws qualitatively similar conclusions; like voters in Massachusetts and Michigan, a majority of California residents were apparently satisfied with the existing levels of most public services at the time of the tax limitation vote. Moreover,

> fully 38 percent of the California electorate believed that state and local governments could provide the same level of services as previously with a 40 percent reduction in their budget.[31]

The similarity of findings from Massachusetts, Michigan and California is striking in light of the different forms of their tax limitation measures and their differing fiscal and economic situations. These findings need not imply that state and local governments were in fact any more inefficient in the late 1970's than in other periods. They do suggest, however, that, for whatever reason -- high and rising property taxes, changing economic conditions or a shift in political ideology -- voters in some states were particularly sensitive to issues of inefficiency and waste during this period.

FOOTNOTES

[1] In 1979, property tax burdens in Massachusetts were the highest of any state in the continental United States, expressed both per capita and per $1000 of personal income. The 1979 per capita burden of $545 was almost double the United States average of $280.

[2] Because of an interviewing error, only 25 of the 55 interviews for the city of Salem were conducted. Hence, throughout the analysis, each Salem respondent is given a weight of two.

[3] A preliminary analysis and description of the survey results can be found in Ladd and Wilson, "Proposition 2½: Explaining the Vote." Appendices A, B and C of that report describe the sampling plan, the questionnaire and interviewing procedure and present a demographic profile of the sample.

[4] The Massachusetts Teachers' Association proposal was defeated by a 36 to 64 percent vote.

[5] See Courant, Gramlich, and Rubinfeld (1980 and 1981) for an analysis of the Michigan vote and the comments by Oakland in Ladd and Tideman (1981), p. 76.

[6] To check whether people would have voted differently had Proposition 2½ been a constitutional amendment, respondents were asked whether or not they thought Proposition 2½ was an amendment to the constitution. Those respondents who answered correctly were then asked how they would have voted had it been a constitutional amendment. A comparison of these responses with their reported votes shows a small net shift of 40 votes against the proposition (out of our total voter sample of 1,253 respondents) had it been a constitutional amendment.

[7] In Massachusetts' relatively simple government structure, the 351 cities and towns of the Commonwealth levy all the property taxes. Both the county governments, which have few responsibilities, and the limited number of special districts finance themselves by assessing the cities and towns.

[8] The property tax is the only broad-based tax available to cities and towns. Aside from small amounts of revenue from the motor vehicle excise tax (about 6.5 percent of local tax revenues before Proposition 2½), charges, fees, and intergovernmental aid provide municipalities' only other revenue.

[9] Most school district boundaries are coterminous with those of cities and towns. Before Proposition 2½, school committees enjoyed fiscal autonomy in the sense that each city or town body was required to accept the proposed school budget and to raise the necessary property taxes as part of the municipal tax levy.

[10] If voters were perfectly rational, it would be desirable to interact each preference variable with an expectations variable. This would allow fiscal changes that are simultaneously preferred and expected to exert a larger impact on the probability of a "yes" vote on Proposition 2½ than those that are either preferred but not expected or expected but not preferred. In addition to being unmanageable, a complete interactive specification would require many arbitrary assumptions. Hence, the basic model reported here eschews interactions in favor of a more inclusive range of possible fiscal motivations. But see footnotes 20 and 23 below.

[11] Of the (weighted) total of 1586 respondents, 1253 said they voted on Proposition 2½. Of these, 139 were eliminated because of incomplete information.

[12] Throughout this paper we refer to the impact of a variable on the probability of a "yes" vote or on the statewide favorable vote for Proposition 2½. These statements should be interpreted to refer to the population of Massachusetts household heads, rather than to the entire population of voters.

[13] This simplicity comes, however, from the imposition of a functional form that is theoretically inferior to the logit form. As noted in the appendix, the two forms have similar implications for the relative importance of the various motivating factors.

[14] The sample probability of a "yes" vote is .58 and of a "no" vote .42. Hence the percent that would be correctly predicted by chance using these aggregate probabilities is $(.58)^2 + (.42)^2 = .51$.

[15] For the simple case of a 0-1 variable, the weighted impact is calculated by multiplying the estimated coefficient by the proportion of the sample having the specified characteristic. See footnote 22 below.

[16] See Ladd and Wilson, "Proposition 2½: Explaining the Vote"; Citrin "Do People Want Something for Nothing: Public Opinion Polls on Taxes and Government Spending"; and Courant, Gramlich and Rubinfeld, "Why Voters Support Tax Limitation Amendments: The Michigan Case."

[17] A combination of factor analysis and judgment were used to define the five service clusters. The responses to questions about preferred service levels for each of the 15 separate services included in the survey were first factor analyzed using a principal axis approach with quartimax rotation. Based on the factor loadings, the 15 services were initially grouped into six factors as follows (with factor loadings in parentheses):

1. Public elementary and high school education (0.51), after school programs (0.77), adult education (0.56), local parks and recreation (0.51) and state colleges and universities (0.74).

2. Police (0.78) and fire (0.80) services.
3. Garbage pick-up (0.73) and street and sidewalk repairs (0.68).
4. Special education (0.64), mental health programs (0.75) and services for the elderly (0.69).
5. Welfare and other public assistance (0.70), and support for local public transit (0.65).
6. Courts and judges (0.86).

Three services were then excluded: Courts and judges were eliminated to reduce the number of clusters; support for local public transit, because of the low correlation between voters' expectations about Proposition 2½'s impact on public transit and on welfare; and state and community colleges, because they are financed differently than the other services in the education and recreation cluster.

[18] The welfare cluster consists of a single item.

[19] Responses were averaged across those items in the cluster for which responses were given. This procedure makes it possible to keep in the sample those observations missing individual parts of the question, provided a response was given for at least one item in the cluster.

[20] The model was also estimated with preferences and expectations interacted by service category. Because dummy variables were used to construct the interaction variables (e.g., prefer but do not expect a reduction in public safety), this alternative specification has the advantage of not requiring any arbitrary assumptions about the intervals between response categories. Because response categories had to be collapsed to keep the total number of variables to a manageable number, however, the interactive model is also somewhat arbitrary. See footnote 23 below.

[21] This conclusion is confirmed by the interactive version of the model. Among voters who said they did not want welfare cuts, those who expected large cuts were more likely to support Proposition 2½ than those who expected no cuts and were almost as likely to support it as those who both wanted and expected reduced welfare services.

[22] For variables taking on n discrete values, the expression for the weighted impact (M) for the ith variable takes the form:

$$M_i = \sum_{i=1}^{n} f_{ik} \hat{B}_i (V_{ik} - V_{io}) .$$

where f_{ik} is the proportion of the sample in the k^{th} value category of variable i, B_i is the estimated effect of the i^{th} variable in the voting model, V_{ik} is the k^{th} value of the i^{th} variable and V_{io} is the value of the value of the i^{th} variable for the case of no change. (V_{io} equals 3 on a 5-point linear scale and ln3 on a 5-point logarithmic scale). For multi-valued variables (e.g., variables that represent clusters of responses), M_i is approximated by letting k refer to intervals (each of length one standard deviation) and V_{ik} to the mean value in the k^{th} interval. For most of the calculations, six intervals were used, three on either side of V_{io}.

[23] The comparable weighted impact from the interactive specification is 18.2 percentage points. The implications of the reported specifications are thus virtually identical to those of the richer interactive specification.

[24] Ladd and Wilson, pp. 30-33.

[25] Earlier versions of the model included two dummy variables for each spending category to represent perceptions of some inefficiency (5 to less than 15 percent possible spending reduction) and much inefficiency (greater than 15 percent possible spending reduction). The similarity between the coefficients in each pair justifies the single set of dummy variables reported in the final equation.

[26] In the logit model, the variable representing perceptions of inefficiency in state government is also statistically significant at the five percent level.

[27] The school spending coefficient is not statistically significant in the logit model.

[28] These data are from responses to two questions: "Sometimes it seems that certain groups of people pay a lot in taxes but don't get very many services while others don't pay much in taxes but get a lot of services. Using the phrases in list one, please tell me whether ________ get a lot less than they pay for, a little less, the same amount as they pay for, a little more, or a lot more than they pay for"; and "Now we'd like you to think about two years ago. Taking into account services they get for the taxes they pay, are ________ better off, worse off, or about the same now as they were two years ago?" In the case of the first question, the responses were scored on a five-point scale, ranging from a lot less (1) to a lot more (5). In the case of the second question, the responses were scored on a three-point scale, ranging from better off (1) to worse off (3).

The variables used in the regression model were computed by subtracting respondents' scores for their households from their scores for other groups. The value 1 was given to those respondents who thought a specific group paid less for services or was better off now than the respondent's household.

[29] Ladd and Wilson, p. 19.

[30] Courant, Gramlich and Rubinfeld, "Why Voters Support Tax Limitations: The Michigan Case," (1980 and 1981), p. 18.

[31] Citrin, p. 115.

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APPENDIX A

WEIGHTED IMPACTS BY MODEL TYPE

The logit model is conceptually superior to the linear model but is more difficult to interpret. This appendix illustrates that the results from the linear model are similar to those from the logit model.

The weighted impacts from the logit model have been calculated from two starting points: the 9.6 percent favorable vote predicted to occur if voters had neither wanted nor expected any public sector changes and the favorable vote of 58.5 percent predicted to occur if everyone were characterized by mean values for all the variables included in the model. Thus, the logit entries in the following tables represent upper and lower bound estimates of the impact of the specified beliefs on the statewide vote of household heads for Proposition 2½.

Table A-1: PREFERRED AND EXPECTED CHANGES IN SERVICE LEVELS

IMPACTS ON STATEWIDE VOTE FOR PROPOSITION 2½

By Model Type

Variable	Logit Model		Linear Model
	Base = 0.096[a] ($\hat{P}$ - 0.096)	Base = 0.585[b] (0.585 - $\hat{P}$)	Base = 0.0260[c] ($\hat{P}$ - 0.260)
Education and Recreation			
Preferences	-0.006	-0.017	-0.007
Expectations	-0.035	-0.111	-0.060
Combined	-0.039	-0.126	-0.067
Public Safety			
Preferences	-0.005	-0.014	-0.006
Expectations	-0.023	-0.069	-0.028
Combined	-0.027	-0.082	-0.034
Sanitation and Street Repair			
Preferences	-0.001[d]	-0.002[d]	0.000[d]
Expectations	-0.013[d]	-0.037[d]	-0.011[d]
Combined	-0.014	-0.039	-0.011
Human Services			
Preferences	0.012[d]	0.034[d]	0.015[d]
Expectations	-0.022	-0.065	-0.032
Combined	-0.003	-0.034	-0.017
Welfare			
Preferences	0.013	0.032	0.016
Expectations	0.034	0.080	0.035
Combined	0.050	0.109	0.051
Total Community Services			
Expectations	-0.040	-0.092	-0.054
Services Used by Household	-0.007[d]	-0.021[d]	-0.008[d]

---

[a] The entries in this column show the impacts on the predicted statewide vote for Proposition 2½ of the actual distributions of preferences and expectations separately by service category compared to the base case which assumes that voters neither want nor expect any public sector changes. For example, the first entry says that the actual distribution of preferences for education and recreational services lowered the vote by 0.6 percentage points compared to the 9.6 percent favorable vote predicted to occur if no one had wanted nor expected changes of any type including changes in the level of educational and recreational services. Note that the combined effect of preferences and expectations for each service category is not merely the sum of the two separate impacts because of the nonlinearity of the model.

(continued)

TABLE A-1 (continued)

[b] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the assumption that no one prefers (for the preference variables) or expects (for the expectations variables) a change in the particular service compared to the 58.5 percent favorable vote predicted to occur if everyone is characterized by mean values for all variables included in the model. To make the signs consistent with those in the other columns, the impact is defined as the predicted value for the base case (0.585) minus the predicted value for the specific simulation under consideration. Thus, the first entry shows that the favorable vote would have been 1.7 percentage points higher than the 0.585 vote predicted for mean values had no voter wanted changes in educational and recreational services.

[c] The entries in this column show the weighted impacts of each variable on the statewide favorable vote for Proposition 2½ derived from the linear model. See Table III.

[d] Based on a coefficient that is statistically insignificant at the five percent one-tailed level.

Table A-2. INEFFICIENCY AND WASTE

IMPACTS ON STATEWIDE VOTE FOR PROPOSITION 2½

By Model Type

Variable	Logit Model Base = 0.096[a] ($\hat{P}$ - 0.096)	 Base = 0.585[b] (0.585 - $\hat{P}$)	Linear Model Base = 0.0260[c] ($\hat{P}$ - 0.267)
Perceptions of Inefficiency in:			
local government	-0.004[d]	-0.012[d]	-0.002[d]
state government	0.065	0.147	0.034[d]
local schools	0.026	0.068	0.031
welfare spending	0.019[d]	0.051[d]	0.015[d]
Attitude			
Local government employees are overpad and do not work hard..	0.009	0.026	0.011
Expectations			
More efficiency in local government	0.057	0.133	0.084
More efficient, responsible, or less corrupt government	0.016	0.043	0.021
More local control over school spending	0.083	0.178	0.090
Combined	0.480	0.486	0.280

[a] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the actual distribution of the indicated variable compared to the base case which assumes that voters neither want nor expect any public sector changes.

[b] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the assumption that no one expects a change or perceives a need for a change compared to the 58.7 percent favorable vote predicted to occur if everyone is characterized by mean values for all variables included in the model. To make the signs consistent with those in other columns, the impact is defined as the predicted value for the base case (0.585) minus the predicted value for the simulation under consideration.

[c] The entries in this column show the weighted impacts of each variable on the statewide favorable vote for Proposition 2½ derived from the linear model. See Table V.

[d] Based on a coefficient that is statistically insignificant at the five percent one-tailed level.

Table A-3. SPENDING AND TAXES

IMPACTS ON STATEWIDE VOTE FOR PROPOSITION 2½

By Model Type

Variable	Logit Model		Linear Model
	Base = 0.096[a]	Base = 0.585[b]	Base = 0.0260[c]
	($\hat{P}$ - 0.096)	(0.585 - $\hat{P}$)	($\hat{P}$ - 0.267)
Want lower spending and taxes			
-- state government	0.015[d]	0.039[d]	0.018[d]
-- local government	0.009[d]	0.026[d]	0.012[d]
-- local schools	0.010[d]	0.027[d]	0.023
Expect decrease in school funds	-0.024	0.073	-0.041
Expect lower property taxes	0.117	0.229	0.106
Expect higher state taxes	-0.026	-0.143	-0.063
Expect lower household taxes	0.021	0.055	0.024

---

[a] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the actual distribution of the indicated variable compared to the base case which assumes that voters neither want nor expect any public sector changes.

[b] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the assumption that no one wants a change or expects a change compared to the 58.7 percent favorable vote predicted to occur if everyone is characterized by mean values for all variables included in the model. To make the signs consistent with those in other columns, the impact is defined as the predicted value for the base case (0.585) minus the predicted value for the simulation under consideration.

[c] The entries in this column show the weighted impacts of each variable on the statewide favorable vote for Proposition 2½ derived from the linear model. See Table VI.

[d] Based on a coefficient that is statistically insignificant at the five percent one-tailed level.

Table A-4. TAX REFORM

IMPACTS ON STATEWIDE VOTE FOR PROPOSITION 2½

By Model Type

Variable	Logit Model		Linear Model
	Base = 0.096 ($\hat{P}$ - 0.096)	Base = 0.585 (0.585 - $\hat{P}$)	Base = 0.0260[c] ($\hat{P}$ - 0.260)
Desired Shifts			
SHIFT1: Shift of education to state taxes	0.018	0.047	0.016
SHIFT2: Shift of special education to state taxes	0.000[d]	0.001[d]	0.005[d]
SHIFT3: Shift of other local services to state taxes	-0.004[d]	-0.012[d]	-0.004[d]
SHIFT4: Shift of certain services to user charges	0.012[d]	-0.033[d]	-0.015[d]
Attitudes			
State government should give more aid to reduce property taxes	-0.007[d]	-0.019[d]	-0.010[d]
Support for redistributive taxes and aid[e]	-0.001	-0.003	-0.000
Expectations			
Tax reform	0.039	0.096	0.046
More state aid	0.011[d]	0.030[d]	0.010[d]

[a] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the actual distribution of the indicated variable compared to the base case which assumes that voters neither want nor expect any public sector changes.

[b] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the assumption that no one wants a change or expects a change compared to the 58.7 percent favorable vote predicted to occur if everyone is characterized by mean values for all variables included in the model. To make the signs consistent with those in other columns, the impact is defined as the predicted value for the base case (0.585) minus the predicted value for the simulation under consideration.

[c] The entries in this column show the weighted impacts of each variable on the statewide favorable vote for Proposition 2½ derived from the linear model. See Table VII.

[d] Based on a coefficient that is statistically insignificant at the five percent one-tailed level.

[e] Net effect of those who want and those who do not want a more redistributive fiscal structure.

Table A-5. RELATIVE FISCAL STATUS

IMPACTS ON STATEWIDE VOTE FOR PROPOSITION 2½

By Model Type

Variable	Logit Model		Linear Model
	Base = 0.096[a] ($\hat{P}$ - 0.096)	Base = 0.585[b] (0.585 - $\hat{P}$)	Based = 0.0260[c] ($\hat{P}$ - 0.260)
Perception of fiscal position relative to that of respondent's household			
Business firms are better off--			
Today	-0.012[d]	-0.036[d]	-0.018[d]
Compared to 2 years ago	0.009[d]	0.026[d]	0.018
Poor households are better off--			
Today	0.011[d]	0.029[d]	0.007[d]
Compared to 2 years ago	0.018	0.049	0.015
Minority households are better off--			
Today	0.009[d]	0.026[d]	0.018[d]
Compared to 2 years ago	-0.019	-0.055	-0.019

---

[a] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the actual distribution of the indicated variable compared to the base case which assumes that voters neither want nor expect any public sector changes.

[b] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the assumption that no one wants a change or expects a change compared to the 58.7 percent favorable vote predicted to occur if everyone is characterized by mean values for all variables included in the model. To make the signs consistent with those in other columns, the impact is defined as the predicted value for the base case (0.585) minus the predicted value for the simulation under consideration.

[c] The entries in this column show the weighted impacts of each variable on the statewide favorable vote for Proposition 2½ derived from the linear model. See Table VIII.

[d] Based on a coefficient that is statistically insignificant at the five percent one-tailed level.

Table A-6. PUBLIC SECTOR JOB STATUS

IMPACTS ON STATEWIDE VOTE FOR PROPOSITION 2½

By Model Type

Variable	Logit Model		Linear Model
	Base = 0.096[a] ($\hat{P}$ - 0.096)	Base = 0.585[b] (0.585 - $\hat{P}$)	Base = 0.0260[c] ($\hat{P}$ - 0.260)
State government employee	-0.002[d]	-0.004[d]	-0.003[d]
Local government employee	-0.009	-0.025	-0.010
Local school employee	-0.004[d]	-0.010[d]	-0.005
Combined	-0.014	-0.040	-0.018

[a] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the actual distribution of the indicated variable compared to the base case which assumes that voters neither want nor expect any public sector changes.

[b] The entries in this column show the predicted impacts on the statewide vote for Proposition 2½ of the assumption that no one wants a change or expects a change compared to the 58.7 percent favorable vote predicted to occur if everyone is characterized by mean values for all variables included in the model. To make the signs consistent with those in other columns, the impact is defined as the predicted value for the base case (0.585) minus the predicted value for the simulation under consideration.

[c] The entries in this column show the weighted impacts of each variable on the statewide favorable vote for Proposition 2½ derived from the linear model. See Table IX.

[d] Based on a coefficient that is statistically insignificant at the five percent one-tailed level.

WHO SUPPORTS TAX LIMITATIONS:
EVIDENCE FROM MASSACHUSETTS' PROPOSITION 2½

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WHO SUPPORTS TAX LIMITATIONS:
EVIDENCE FROM MASSACHUSETTS' PROPOSITION 2 1/2

In November 1980, Massachusetts voters overwhelmingly passed Proposition 2 1/2, a stringent property tax limitation measure. Proposition 2 1/2's success at the polls raises a number of questions about support for tax limitation: Did the election represent a revolt of the "haves," frustrated over subsidizing the "have-nots"? Were those most likely to realize tax reductions or those least in need of public services more likely to support the measure? Or did the election represent an ideological split in the electorate, reflecting voters' fundamental beliefs about the appropriate role of government?

Data to explore these questions were collected from half-hour telephone interviews with 1,561 Massachusetts household heads, conducted during the two weeks immediately following the election. An equal number of male and female respondents were selected randomly from 58 communities that are representative of all cities and towns in the state.[1]

This paper focuses on the characteristics of voters who supported Proposition 2 1/2. Section I uses cross-tabular analysis to examine variation in support for the tax limitation measure across a number of demographic, household and municipal characteristics, as well as attitudinal dimensions. Section II then employs multivariate analysis to assess the impact of each of these characteristics on voting behavior, controlling for all other variables. The final section summarizes the Massachusetts findings and compares them to the results of tax limitation studies in California and Michigan.

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[1] For a more detailed description of the survey and the sampling plan, see Appendices A, B, and C of Helen F. Ladd and Julie Boatright Wilson, "Proposition 2 1/2: Explaining the Vote."

I. SELF-INTEREST VS. ROLE OF GOVERNMENT

Self-Interest Hypothesis

Expectations of personal economic benefits may have provided the principal motivation for supporting Proposition 2 1/2. This hypothesis has the straightforward implication that those who expected to receive the greatest financial benefits from the implementation of Proposition 2 1/2 would be the most likely to vote for the measure. Identifying the gainers, however, is difficult because of the open-ended nature of the proposition; different people held differing expectations about what the tax limitation measure would accomplish.

The major impact of Proposition 2 1/2 was to limit property taxes to 2 1/2 percent of fair market value, with high tax rate communities required to reduce tax revenues by 15 percent per year until they reach the maximum allowable level. Additional provisions reduced auto excise taxes, allowed renters an income tax deduction, ended binding arbitration for police and fire personnel, limited the fiscal autonomy of school committees, and prohibited the state from mandating programs without providing funds. At the time of the election, Massachusetts municipalities anticipated losing close to $500 million in revenues if the measure were passed. The initiative petition, however, provided no explicit provision for new state aid or state assumption of local expenditure responsibilities, and did not offer any indication of which local services might be reduced.

In the face of this ambiguity, the extent to which an individual voter expected to benefit from the passage of Proposition 2 1/2 depended on individual preferences for changes in taxes and service levels, and expectations of how the measure would affect taxes, services, intergovernmental aid and government operations. Views on these issues are likely to vary by the respondent's demographic characteristics and the tax and revenue characteristics of the particular city or town where he or she lives.

Respondents preferring more rather than fewer local services should be more likely to vote "no" on Proposition 2 1/2. Preferences for maintaining or increasing public service levels are likely to be greatest among those who are most dependent on local public services (public service users, households with school-age children, low-income voters); those who anticipate using local public services in the future (childless young adults, households with pre-school children); those who are least able to move to communities where higher service levels are available (non-whites, low-income households); those who are least able to purchase alternatives to public services in the private sector (low-income households); those who believe they pay little for local public services (renters, owners with low tax shares); those who are primarily concerned with the day-to-day activities of household members, particularly children (women); those who have historically been committed to public services or whose occupation involves servicing needs (Jews, respondents in households headed by professionals); and those whose household includes a worker employed by local or state government.

Support for Proposition 2 1/2 is likely to increase with the size of expected tax reductions. Because homeowners pay property taxes directly, they are likely to expect greater tax savings than renters.[1] Furthermore, tax savings should increase with the homeowner's share of the local tax burden. In light of Proposition 2 1/2's specific provisions, expectations of tax reductions are likely to vary dramatically across communities depending on existing property tax rates and estimated first-year revenue losses. At the same time, however, large tax savings may imply large service reductions, making the link between first-year revenue losses or the existing tax rate and support for Proposition 2 1/2 less clear cut. To the extent that expectations of tax reductions outweigh concern over service reductions, support for the measure may increase as first year tax savings and pre-Proposition 2 1/2 tax rates increase. To the extent that concern over service reductions is paramount, the opposite relationship should be observed.

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[1] Renters may have been unclear about how Proposition 2 1/2 would affect their taxes and rents. On the one hand, tenants had no guarantee that landlords would pass tax reductions along in the form of lower rents; on the other hand, Proposition 2 1/2 provides some direct tax relief to tenants by allowing them to deduct half their rent from their state income tax returns. Tenants may not have expected these tax savings to be large or may have expected the measure to lead to simultaneous increases in state income or sales taxes.

Support for Proposition 2 1/2 should also increase with respondents' expectations that the measure would encourage more efficient government operations. Because voters with less education are less likely to be aware of the complexities of fiscal issues, those with the least education are more likely to have expected Proposition 2 1/2 to provide tax savings without offsetting service cuts. A respondent's education level is therefore likely to be inversely correlated with support for Proposition 2 1/2. Respondents who are most concerned with management issues and are willing to tolerate service reductions either to improve the efficiency or to limit the scope of local government operations also should be more likely than others to support Proposition 2 1/2. Thus, respondents in households headed by managers may be more likely to vote "yes" on the tax limitation measure than those in households headed by blue-collar workers or professionals.

In sum, the self-interest hypothesis implies that those who were likely to benefit most from the passage of Proposition 2 1/2--i.e., homeowners, less educated respondents, high income households, older childless households, those in households headed by managers or with no member employed by local or state government, men, whites, non-Jews, and non-service users--would be more likely than others to support the measure. The effect of pre-Proposition 2 1/2 property tax rate levels on voting behavior is ambiguous; high tax rates imply larger tax savings but also larger potential service reductions.

Based on data gathered in interviews with Massachusetts household heads, Table I shows the proportions of voters who voted "yes" on

Proposition 2 1/2 by various demographic and community characteristics. In almost all cases, the results are consistent with the view that respondents tend to vote in their own economic self-interest.[1] Men, whites and non-Jews were significantly more likely than women, non-whites and Jews to support the tax limitation measure. Support increased with the age of the household head. The elderly, for example, were 23 percentage points more likely than young households with no children to support the measure. In addition, support for Proposition 2 1/2 was substantially weaker among those with at least a college degree than among those not completing college. Across occupation groups, management households were most likely to support the measure, followed closely by respondents in pink-collar and service worker households; professional households were least likely to support the measure. Support was weakest among respondents in households having a worker employed in the local government or school system, somewhat stronger in households having a state government employee, and strongest in households having no state or local public sector employee. The proportion of "yes" voters on Proposition 2 1/2 also tended to increase with household income, rising dramatically at the $10,000 level.[2]

Renters, particularly those who had never owned and had no immediate plans to own homes, were significantly less likely than homeowners to support Proposition 2 1/2. Among owners, support for the measure tended to increase as the respondent's local tax share increased, although not smoothly.

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[1] The size of the differences required for statistical significance is provided in Appendix A.

[2] Thirty-one percent of the respondents failed to report their household income. These missing data were estimated using a model expressing household income as a function of the age, education level and race of the respondent and the sex, work status, and occupation of each adult head in the household. Sex, occupation and work status were interacted to allow for the possibility that the contribution to household income made by a worker in a particular occupation varies with his or her work status (i.e., full or part-time) and with the sex of the worker (because of labor market discrimination). For a more detailed discussion of the income estimation process, see Appendix C: Income Estimation.

Table I

SUPPORT FOR PROPOSITION 2 1/2
AMONG VARIOUS TYPES OF VOTERS

Demographic Characteristics	Percent who Voted "Yes" on Proposition 2 1/2	Number of Voters in Sample
Total	58.0%	1243
Sex		
Male	63.5	616
Female	52.6	627
Race		
Non-white	38.0	50
White	58.8	1193
Religion		
Catholic	61.2	605
Jewish	42.7	82
Protestant	60.0	360
Other, no religion	51.0	196
Stage in Lifecycle		
Young, no children	47.6	225
Children present, oldest <6	55.0	120
Children present, oldest 6-17	57.9	432
Older adults, no children	59.2	267
Elderly (60+) adults, no children	70.4	199
Education		
Less than high school	62.6	107
High school degree	65.5	386
Some college	60.2	287
College degree	51.8	275
Graduate school	43.1	160
Household Income		
Less than $10,000	46.7	107
$10,000 to <$20,000	60.3	368
$20,000 to <$30,000	56.0	375
$30,000 to <$50,000	61.7	313
$50,000 or more	68.3	60

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Table I (continued)

SUPPORT FOR PROPOSITION 2 1/2
AMONG VARIOUS TYPES OF VOTERS

Demographic Characteristics	Percent who Voted "Yes" on Proposition 2 1/2	Number of Voters in Sample
Occupation of Household Head		
Professional	51.2%	322
Managerial	66.4	268
Clerical, sales	62.3	154
Blue collar	57.3	302
Service	61.4	70
Not reported, no occupation	52.0	127
Government Employee		
Educational employee	31.8	85
Local government employee	29.2	106
State government employee[a]	44.4	45
No local or state employees in household	63.8	1007
Local Tax Share		
Owners: Less than 75% of community avg.	58.5	183
Owners: 75% to <100% of community avg.	67.0	221
Owners: 100% to <125% of community avg.	60.5	157
Owners: $\geq$125% of community avg.	69.8	202
Owners: Taxes not reported	55.3	85
Renters: Never owned, no plans to	38.6	158
Renters: Ever owned	50.0	122
Renters: Plan to own	52.3	86
Neither rent nor own	55.2	29

Table I (continued)

SUPPORT FOR PROPOSITION 2 1/2 AMONG VARIOUS TYPES OF VOTERS

Service Use and Community Characteristics	Percent who Voted "Yes" on Proposition 2 1/2	Number of Voters in Sample
SERVICE USE		
Public Elementary and High School Education		
Use	58.2%	411
Do not use	57.9	832
Private School		
Use	59.0	100
Do not use	57.9	1143
Human Services		
Use	52.6	190
Do not use	59.0	1053
Welfare		
Use	44.6	65
Do not use	58.7	1178
After School Programs or Recreation Facilities		
Use	53.0	783
Do not use	66.5	460
COMMUNITY CHARACTERISTICS		
Anticipated 1982 Revenue Loss		
Less than 10%	54.3	335
10% to 14.9%	59.0	385
15% or more	61.9	504
Pre-Proposition 2 1/2 Tax Rate		
less than 2.5%	53.8	160
2.5% to 3.9%	59.2	519
4.0% to 4.9%	63.3	270
5.0% or more	53.4	294

---

[a] "State government employee" includes county employees.

For all services except schools, users were less likely than non-users to support the tax limitation measure. The similarity of support between school users and non-users may reflect anticipated use of education services by young childless households or those with pre-school children. There is no evidence that those whose children attend private or parochial schools were more willing than others to support Proposition 2 1/2.

The proportion of respondents supporting Proposition 2 1/2 increased systematically with the size of the first year revenue losses in the respondent's community, suggesting that anticipation of immediate tax reductions outweighed fear of service cuts. The pattern of support across tax rate categories was mixed, however, increasing as the tax rate rose to the five percent level and then decreasing. While respondents' anticipations of tax savings and efficiency gains thus seem to have outweighed concern over service reductions in low tax rate communities, concern over service cuts may have been particularly important to voters in communities facing several years of property tax reductions because of their high 1981 property tax rates.

Role of Government Hypothesis

An alternative hypothesis explaining support for Proposition 2 1/2 is that voters were motivated less by personal economic benefits than by more general attitudes about the role of government. Voters may even have voted against their particular self-interests because of fundamental beliefs about the government's responsibility for the welfare of individual citizens. This hypothesis implies that those who report being politically conservative, who believe the government should be less involved in helping people, or who believe that those currently dependent on the government could support themselves would be more likely than others to vote "yes" on Proposition 2 1/2.

The data presented in Table II are consistent with this hypothesis. More conservative respondents were more likely than liberal respondents to have voted for Proposition 2 1/2. Similarly, the more respondents feel "welfare recipients could find jobs if they really tried," the more they believe "people expect too many services

Table II

SUPPORT FOR PROPOSITION 2 1/2 BY POLITICAL ATTITUDES

	Percent Who Voted "Yes" on Proposition 2 1/2	Number of Voters in Sample
Total	58.0%	1,243
Self-proclaimed Political Ideology		
Very conservative	72.4	98
Fairly conservative	65.4	327
Middle-of-the-road	62.0	482
Fairly liberal	42.4	231
Very liberal	36.4	77
Welfare recipients could find jobs if they really tried		
Agree a lot	66.0	564
Agree a little	59.2	380
Disagree a little	44.4	180
Disagree a lot	28.4	95
People expect too many services from the government		
Agree a lot	71.2	466
Agree a little	55.7	405
Disagree a little	41.5	253
Disagree a lot	49.5	111
The government should make sure that each family has enough to live on		
Agree a lot	51.2	410
Agree a little	56.2	349
Disagree a little	58.9	265
Disagree a lot	68.4	196

from the government," and the less they believe "the government should make sure each family has enough to live on," the more likely they were to support the tax limitation measure. Massachusetts household heads thus apparently voted in a manner consistent with their fundamental beliefs about the appropriate responsibilities of government.

To what extent are respondents' attitudes toward government merely rationalizations for behavior motivated primarily by economic self-interest? Is there any evidence that the attitudes toward government operate independently of economic self-interest? The following section addresses these and related questions.

II. MULTIVARIATE ANALYSIS

Table III reports the coefficients of a linear probability model in which the probabilty of a "yes" vote on Proposition 2 1/2 is a function of the fiscal characteristics of the respondent's community and the respondent's demographic characteristics and attitudes toward the role of government. Use of multivariate regression analysis isolates the effect of individual variables on the vote by controlling for all other variables. Each of the 50 variables in the equation, including those discussed above plus additional fiscal characteristics of the respondent's community, is hypothesized to influence voting behavior through its impact on respondents' preferences, perceptions or expectations about what Proposition 2 1/2 would accomplish.[1] The equation is based on the responses of 1,182 household heads for whom complete information is available.

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[1] In "Why Voters Support Tax Limitations: Evidence From Massachusetts' Proposition 2 1/2," Ladd and Wilson report the results of a behavioral model based on the same survey data that expresses voting behavior as a function of respondents' preferences, perceptions and expectations relating to several public policy issues. Each of the preferences, perceptions and expectations can, in turn, be expressed as a function of exogenous municipal, demographic, and attitudinal characteristics. The equation reported here may therefore be viewed as the reduced form of the complete structural model.

Table III

SOURCES OF SUPPORT FOR PROPOSITION 2 1/2: REDUCED FORM MODEL[a]

Variable[b]	Coefficient	t Value
COMMUNITY CHARACTERISTICS		
1982 Revenue Loss[c]	.65	1.87
Pre-Proposition 2 1/2 tax rate[d]		
Less than 2.5%	Base	--
2.5% to 3.9%	-.07	-1.10
4.0% to 4.9%	-.06	-0.86
5.0% or more	-.16	-2.02
Per Pupil Spending on Public Education[e]	-.00003	-0.60
Per Household Spending on Non-education Services[f]	.0001	1.98
% Households Below Poverty Level[g]	.66	0.79
% Household Headed by Non-whites[h]	-.94	-1.77
% Real Estate Revenue from Commercial and Industrial Properties[i]	.27	2.13
PERSONAL DEMOGRAPHIC AND HOUSEHOLD CHARACTERISTICS		
Sex		
Male	Base	--
Female	-.08	-2.88
Race		
Non-white	-.11	-1.44
White	Base	--
Religion		
Catholic	-.02	-0.67
Jewish	-.16	-2.75
Protestant	Base	--
Stage in Lifecycle		
Young, no children	-.001	-0.02
Children present, oldest <6	-.01	-0.14
Children present, oldest 6-17	-.01	-0.13
Older adults, no children	Base	--
Elderly (60+) adults, no children	.08	1.67

Table III (continued)

SOURCES OF SUPPORT FOR PROPOSITION 2 1/2: REDUCED FORM MODEL[a]

Variable[b]	Coefficient	t Value
Services Used		
Public elementary and secondary education	.01	0.17
Private schools	-.03	-0.52
Parks or after school programs	-.07	-2.23
Elderly, mental health or special education services	-.05	-1.18
Welfare	-.08	-1.25
Education of Respondent		
Less than high school	Base	--
High school degree	.01	0.25
Some college	-.05	-0.90
College degree	-.09	-1.46
Graduate school	-.13	-1.86
Household Income[j]		
Less than $10,000	-.08	-1.44
$10,000 to <$20,000	Base	--
$20,000 to <$30,000	-.04	-1.21
$30,000 to <$50,000	.04	1.07
$50,000 or more	.07	0.96
Occupation of Household Head[k]		
Professional	.03	0.75
Managerial	.09	2.11
Clerical, sales	.05	1.14
Blue-collar	Base	--
Service	.09	1.48
Not reported, no occupation	.01	0.28
Employer		
Local public schools	-.27	-4.95
Other local government	-.32	-6.46
State or county government	-.12	-1.61
Not local or state government	Base	--

Table III (continued)

SOURCES OF SUPPORT FOR PROPOSITION 2 1/2: REDUCED FORM MODEL[a]

Variable[b]	Coefficient	t Value
Local Tax Share		
Homeowners		
Less than 75% of community avg.	Base	--
75% to <100% of community avg.	.07	1.52
100% to <125% of community avg.	-.01	-0.12
≥125% of community avg.	.07	1.40
Taxes not reported	-.02	-0.30
Renters		
Never owned, no plans to	-.14	-2.52
Ever owned	-.01	-0.17
Plan to own in next 5 years	-.07	-1.08
Neither rent nor own	-.07	-0.66
ATTITUDES AND IDEOLOGY		
Political Ideology[l]		
Conservative	.01	0.18
Middle of the road	Base	--
Liberal	-.11	-2.95
Attitude to welfare recipients		
Believe welfare recipients could find jobs if they really tried	.12	3.52
Believe welfare recipients could not find jobs if they really tried	Base	--
Government's role vis-a-vis individuals[m]		
Individuals should rely less on government	.10	3.42
Government should help individuals	Base	--

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[a] Based on 1,182 respondents for whom complete information was available. Estimated using ordinary least squares. The dependent variable takes on the value of 1 for a "yes" vote. The R^2 is .21.

[b] Variables enter the equation as continuous linear variables and binary 0-1 variables.

[c] Anticipated 1982 revenue loss, including both property taxes and auto excise taxes, as a proportion of all 1981 revenues in respondent's city or town.

[d] Full value tax rates in 1981 as estimated by the Massachusetts Department of Revenue.

Table III (continued)

[e] 1981 operating expenditures of education per public school student in respondent's city or town.

[f] 1981 expenditures (minus pension costs, debt service and operating expenditures for education) per household in respondent's city or town.

[g] Percentage of households in respondent's city or town with incomes below the poverty level.

[h] Percentage of residents in respondent's city or town who are not white.

[i] Assessed value of commercial and industrial property as a proportion of total assessed valuation in the respondent's city or town.

[j] Missing income data were estimated using a multivariate procedure described in Appendix C of Helen F. Ladd and Julie Boatright Wilson, *Tax Limitations in Massachusetts*.

[k] Household head is defined as the male in joint households and the respondent in single-adult households. Research suggests that in joint households, status and economic situation are more likely to be defined by the male's occupation than the female's.

[l] Respondent's political self description recorded on a five-point scale in which very conservative = 1, fairly conservative = 2, middle of the road = 3, fairly liberal = 4, and very liberal = 5.

[m] Dummy variable formed from two attitude statements: "People expect too many services from the government," and "The government should make sure that each family has enough to live on." Scores on the latter statement were reversed to make it consistent with the first statement. All attitude items were scored on a four-point scale: disagree a lot = 1, disagree a little = 2, agree a little = 3, agree a lot = 4. Respondents believing the government should have a more restrictive role, those with mean scores greater than 2.5, were assigned a value of 1.

Municipal Characteristics

The specific municipal characteristics included in the model attempt to capture variation in tax rates, in spending levels, and in the composition of the population and the tax base across communities. The equation shows that the higher the 1982 revenue loss, expressed as a proportion of 1981 revenues, the greater the probability that the respondent voted for Proposition 2 1/2. This relationship is statistically significant and suggests that expectations of immediate tax savings outweighed concerns about possible service losses. The higher the local pre-Proposition 2 1/2 tax rate, however, the more likely the respondent was to vote "no." Although not all the community tax rate dummy variables are statistically significant, opposition tends to increase with tax rates, suggesting that concerns about long-term service reductions were more important to voters than the expectation of long-term tax savings. This differs somewhat from the cross tabular analysis which showed that support increased up to a tax rate of 5.0 percent, and then declined.

The model includes two local spending variables: per pupil spending on education services and per household spending on non-education services. The measures are only crude proxies for local service levels, since they capture variation in the costs of producing services as well as variation in the quantity and quality of services delivered. The data in Table III indicate that while the level of per pupil education spending had little or no influence on the vote, the coefficient for non-school spending is positive and statistically significant. This result implies that respondents in communities with high non-school spending per household were more likely to support Proposition 2 1/2 than those in communities with low spending levels. While these findings suggest that people were basically satisfied with pre-limitation levels of school spending, respondents in communities with high non-school spending apparently preferred lower levels, perhaps because of beliefs that such expenditures could be cut without reducing service levels.

To measure the composition of the local population, the model includes the proportion of households in the community below the poverty level and the proportion of households headed by a non-white. Both variables account for variations across communities in service needs; the former also reflects variation in ability to pay. The equation shows that the proportion of poor households in a community has little or no effect on the Proposition 2 1/2 vote. In contrast, as the proportion of non-white residents increases, support for Proposition 2 1/2 decreases.[1] This finding apparently reflects a willingness to use the public sector to aid a segment of the population that has traditionally faced discrimination in both the public and private sectors.[2]

The composition of the tax base is measured by the proportion of total property tax revenues coming from commercial and industrial property. As the proportion from business property increases, respondents are more likely to support the tax limitation measure. This may reflect respondents' beliefs that business does not pay its fair share of taxes.

Demographic and Household Characteristics

In most cases, the relationships between the demographic variables and voting behavior that emerge from the multivariate equations resemble the results from the cross-tabular analysis: with only a few exceptions, controlling for municipal characteristics and political attitudes thus does not alter the relationships shown in Table I.

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[1] In "Why Voters Support Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2," Ladd and Wilson found that belief that the poor were benefiting at the respondent's expense was weakly associated with an increased likelihood of voting "yes," while belief that minorities were benefiting at his or her expense was associated with an increased likelihood of voting "no."

[2] Non-white households tend to be clustered primarily in the cities. It might be argued that residents of more racially heterogeneous communities are more liberal and therefore that the measure of racial heterogeneity is really a proxy for community political ideology. The findings reported here, however, are the effects on voting after controlling for political orientation and ideology.

Women, non-whites and Jews were again significantly more likely to oppose Proposition 2 1/2 than men, whites and members of other religious groups. Stage in the lifecycle exhibits little relationship to voting behavior in the multivariate model, however, with the one exception that elderly respondents were the group most likely to support Proposition 2 1/2. Thus, many of the differences in voting behavior across life-cycle categories that were noted earlier apparently reflect differences in such characteristics as income, education, tenure and attitudes toward government.

The likelihood of voting "no" on Proposition 2 1/2 increases as the respondent's educational attainment increases. This pattern is similar to that observed in the cross-tabular analysis and suggests that those with more education view the tax and spending situation as highly complex and therefore are less likely to expect the measure to offer a simple solution to the problem of high property taxes.

Household income displays the same relationship to the vote in both the multivariate and cross-tabular analyses: support for Proposition 2 1/2 generally increased with household income. Households in the lowest income category (under $10,000) were significantly less likely than those in the highest income categories ($30,000 or more) to support the measure. This result apparently reflects the fact that lower income households have fewer resources and are more dependent on public services.

Occupation of the household head continues to influence respondents' voting behavior in the predicted direction, even after controlling for income and education differences. Respondents from households headed by managers and service workers were both about nine percentage points more likely to support Proposition 2 1/2 than those from households headed by blue-collar workers. Respondents in clerical and sales households fell between the two extremes, while those in professional households tended to respond similarly to those in blue-collar households. In addition, respondents in households with a member working in the local school system or local government were significantly more likely than others to oppose the tax limiation measure. This result presumably reflects the fact that these respondents expected their households to experience layoffs or changing job conditions from passage of Proposition 2 1/2.

The importance of anticipated tax reductions is evident in the finding that renters were less likely than homeowners to support Proposition 2 1/2, even after controlling for other demographic and municipal characteristics. Renters who have never owned and had no immediate plans to own were significantly less likely than owners to vote "yes." Among owners, the probability of supporting Proposition 2 1/2 is seven percentage points greater among respondents in the highest tax share group (125 percent or more than city average) than in the lowest tax share group (75 percent or less than average). The middle two tax share groups, however, do not exhibit the expected pattern.

Current or potential service usage generally decreases the probability of supporting Proposition 2 1/2; their independent influence, however, is statistically significant only in the case of after-school or recreation services. The fact that users of after-school programs were significantly more likely than non-users to vote "no" probably reflects the attention focused on cuts in these programs by the anti-Proposition 2 1/2 groups during the campaign. The equation provides no support for the conclusion that households with children attending public school are less likely to support Proposition 2 1/2 than other households, all other variables held constant.[1]

Political Ideology and Attitudes Toward the Government

Respondents were asked to describe themselves politically. The results of the equation indicate that those claiming to be liberal were 11 percentage points less likely to support the measure than those claiming to be middle-of-the-roaders. Somewhat surprisingly, however, those claiming to be conservative did not differ from the middle-of-the-roaders in their support for Proposition 2 1/2.

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[1] Because the use of services provided to children and the lifecycle stage of school-age children may be highly correlated, alternative equations were estimated eliminating each set of variables. The results remain the same: neither public service usage nor the presence of school-age children appear to influence the probability of a "yes" vote.

The equation also includes measures of attitudes about the appropriate scope of government vis-a-vis individuals and about recipients of one particularly controversial government service, i.e., welfare and income support programs. Attitudes toward the appropriate scope of government are entered in the equation as a dummy variable created from a cluster formed from two of the attitude statements discussed above: "People expect too many services from the government," and "The government should make sure that each family has enough to live on."[1] As the data in Table III show, those who believe the government should be less involved in supporting people were 10 percentage points more likely to support Proposition 2 1/2; those who believe "welfare recipients could find jobs if they really tried" were 12 percentage points more likely to support the tax limitation measure.

III. SUMMARY AND CONCLUSIONS

Survey information has also been used to determine who supported tax limitation measures in California and Michigan.[2] California's Proposition 13, like Massachusetts' Proposition 2 1/2, reduced local property taxes and capped their rate of growth; Michigan's Headlee Amendment, in contrast, primarily limited the growth of state government revenues. At the time of the tax limitation vote, California enjoyed a substantial state surplus; Michigan and Massachusetts did not. Compared to the other states, Massachusetts relied more heavily on property taxes to finance local services. Moreover, California was in the midst of a housing market boom while Michigan was suffering from high unemployment caused by the depressed automobile market. Despite these major differences in the form of the limitation measures and in the states' fiscal and economic climates, the studies show that similar types of people supported tax limitation.

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[1] Factor analytic techniques were used to cluster these attitude items. Scores from the latter statement were reversed to make them consistent with those from the former.

[2] See Citrin, 1979 and Courant et al., 1981.

Table IV compares the findings from the California and Michigan studies with the results for Massachusetts. For Massachusetts and Michigan, the equations are linear probability models; for California, the equation is a probit model. Only the Massachusetts equation includes municipal characteristics.

When the studies include similar variables, the relationships between the variables and support for the specific limitations are the same. For example, support for tax limitation was strongest among men, whites, less well-educated respondents, older respondents, homeowners, conservatives and non-Democrats; opposition was strongest among households with state or local public sector employees. All three studies show that higher-income voters were more likely than middle-income voters to support tax limitation. The behavior of low-income respondents, however, varies somewhat across states either because of differences in model specification or because of actual differences in behavior. The finding that low-income households were the most likely of all income groups to support the tax limitation measure in Michigan could thus reflect the absence of an educational background variable from the model. The similarity of results for the demographic and ideology variables across studies indicates a certain commonality to the tax revolt, suggesting that the findings can be generalized from one state to another.

This study of Proposition 2 1/2 clearly indicates that household heads voted in their apparent economic self-interest. The vote does not, however, reflect a major social cleavage between those who had a lot to gain and those who had a lot to lose if the measure passed. Each respondent is defined by many demographic characteristics that influence voting behavior. Some characteristics associated with support are positively correlated with others associated with

Table IV

COMPARISONS OF FINDINGS IN STUDIES OF SUPPORT FOR TAX LIMITATIONS IN THREE STATES[a]

	Massachusetts: Proposition 2 1/2[b]	California Proposition 13[c]	Michigan: Headlee Amendment[d]
DEMOGRAPHIC CHARACTERISTICS			
Sex	Women less likely to support	NI	Women less likely to support
Race	Non-whites less likely to support	Blacks less likely to support	Blacks less likely to support
Religion	Jews less likely to support	NI	NI
Life-cycle stage/age	No effect at younger ages, but older are more likely to support	No effect, but entered as continuous variable	No effect, but older are somewhat more likely to support
Service usage	After school program users and welfare recipients less likely to support	NI	Public school users and transfer recipients less likely to support
Education	More educated less likely to support	More educated less likely to support	NI
Household income	High income more likely than middle income to support	Higher income and lowest income more likely than middle income to support	High income and low income more likely than middle income to support
Occupation	Managers and service workers most likely to support	NI	NI
Unemployed	NI	NI	Less likely to support
Public employee in household	Less likely to support	NI	Less likely to support
Renters	Less likely to support	Less likely to support	Less likely to support
Tax share of owners	Mixed relationship	NI	NI
ATTITUDES			
Political ideology	Conservatives more likely to support	Conservatives more likely to support	NI
Scope of government	Believers that govt. should limit its scope, more likely to support	NI	NI
Attitudes to welfare recipients	Believers that welfare recipients could work more likely to support	NI	NI
Party registration	NI	Democrats less likely to support	Democrats less likely to support

Table IV (continued)

COMPARISONS OF FINDINGS IN STUDIES OF SUPPORT FOR TAX LIMITATIONS IN THREE STATES[a]

	Massachusetts: Proposition 2 1/2[b]	California Proposition 13[c]	Michigan: Headlee Amendment[d]
MUNICIPAL CHARACTERISTICS			
Anticipated revenue loss	Higher revenue loss, more likely to support	NI	NI
Pre-limitation tax rate	Higher rate, less likely to support	NI	NI
Spending levels	Higher per capita non-education spending more likely to support	NI	NI
Population diversity	Higher percentage non-white, less likely to support	NI	NI
Tax base diversity	Higher percentage commercial and industrial, less likely to support	NI	NI

NI = Not included.

[a] All findings are based on multivariate techniques and thus estimate the relationship between any one variable and support for the tax limitation measure controlling for all other variables included in the equation.

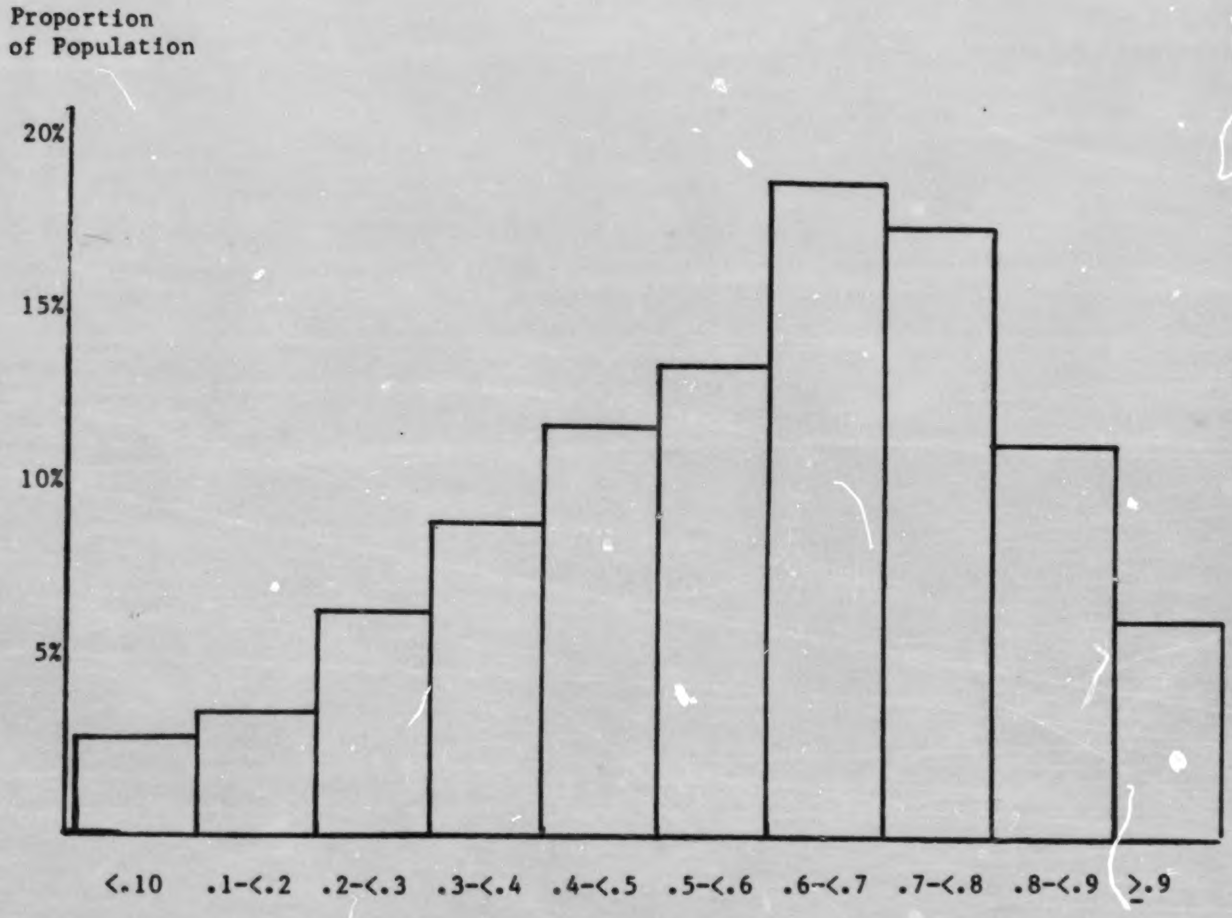
[b] Proposition 2 1/2 limited local property tax rates to 2 1/2% of fair market value and limited the growth of property tax levies to 2 1/2%.

[c] Based on Jack Citrin, "Do People Want Something for Nothing: Public Opinion on Taxes and Government Spending", National Tax Journal, Vol. XXXII, No. 2, Supplement, June 1979, pp. 113-129. Proposition 13 reduced local property tax rates and limited the growth of assessments.

[d] Based on Paul M. Courant, et al., "Why Voters Support Tax Limitation Amendments: The Michigan Case", in Helen F. Ladd and T. Nicolaus Tideman (eds.), Tax and Expenditure Limitations, Washington, D.C.: The Urban Institute Press, 1981, pp. 37-72. The Headlee Amendment limited the growth of state revenues.

CHART I

PREDICTED PROBABILITY OF VOTING "YES" ON PROPOSITION 2 1/2[a]



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[a] Predictions based on equation reported in the text.

opposition to the measure: high income, for example, contributes to a greater likelihood of voting "yes" on Proposition 2 1/2 while high educational attainment contributes to a greater likelihood of voting "no." As Chart I demonstrates, few voters possess the unique combination of demographic characteristics that would imply total support or opposition; most have a combination of demographic characteristics that imply offsetting impacts on the probability of support for the tax limitation measure.

The study also shows that political ideology and attitudes about the appropriate scope of government influence voting behavior, even after controlling for demographic characteristics. Otherwise similar people may thus vote differently if they have different political orientations. While these attitudes are somewhat correlated with personal characteristics, the fact that political orientations differ among otherwise similar household heads dilutes the influence of the demographic characteristics and provides further support for the assertion that the election was not simply a victory for the "haves" over the "have-nots."

Finally, the Massachusetts study indicates that community characteristics influenced the vote. Two household heads sharing the same demographic characteristics and holding similar beliefs about the appropriate role of government may have different probabilities of supporting tax limitation depending on their residence. Respondents in high tax rate communities, who had the most to lose in the way of services from Proposition 2 1/2, were less likely to support the measure than residents in low tax rate communities. To the extent a state is as balkanized as Massachusetts, a favorable vote for tax limitation may thus be a way for the better-off communities to benefit at the expense of those that are less well off. Where tax limitations have smaller differential effects, however, variation in community characteristics may be a less important influence on the vote.

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APPENDIX A

STATISTICAL SIGNIFICANCE OF PERCENTAGE DIFFERENCES

STATISTICAL SIGNIFICANCE OF PERCENTAGE DIFFERENCES

Table A-I is a guide for determining the significance (two standard errors) of differences in percentages between any two subgroups in the overall sample. The size of the difference necessary for significance decreases as the sample sizes increase and as the percentages being compared move away from 50 percent in either direction. Thus, a separate table is presented for each of four sets of percentages. The entries in each cell define the range of necessary differences for samples of varying sizes. The lower number is the difference required for significance between two simple random samples. The higher number, 1.25 times the lower number, is a conservative estimate of the difference required for significance when other sample designs are used.

A stratified random cluster sample plan was used in this study. Stratification reduces the size of the standard errors relative to those in simple random samples; clustering increases the size of the standard errors. Because the sampling plan incorporated a large number of clusters (65) with a small number of interviews in each cluster (15 to 25), any increase in standard errors due to clustering should be minor and more than offset by the decreases gained through stratification. Thus the entries at the lower end of each scale represent conservative estimates of the difference in percentages required for significance between any two subgroups in this study.

The sizes of the subgroups analyzed in this paper are presented in Tables I and II in the text.

Table A-I

EXAMPLE OF SAMPLING ERRORS OF DIFFERENCES BETWEEN PERCENTAGES[1]

No. of Inter-views	No. of Interviews							
	2000	1000	700	500	400	300	200	100
	For Percentages from 35 to 65							
2000	3.2–4.0	3.9–4.9	4.4–5.5	5.0–6.2	5.5–6.9	6.2–7.8	7.4–9.2	10–12
1000		4.5–5.6	4.9–6.1	5.5–6.9	5.9–7.4	6.6–8.3	7.7–9.6	10–13
700			5.3–6.6	5.9–7.4	6.3–7.9	6.9–8.6	8.0–10	11–13
500				6.3–7.9	6.7–8.4	7.3–9.1	8.4–10	11–13
400					7.1–8.9	7.6–9.5	8.7–11	11–14
300						8.2–10	9.1–11	12–14
200							10–12	12–15
100								14–17
	For Percentages around 20 and 80							
2000	2.5–3.1	3.1–3.9	3.5–4.4	4.0–5.0	4.4–5.5	5.0–6.2	5.9–7.4	8.2–9.8
1000		3.6–4.5	3.9–4.9	4.4–5.5	4.7–5.9	5.3–6.6	6.2–7.8	8.4–10
700			4.3–5.4	4.7–5.9	5.0–6.2	5.5–6.9	6.4–8.0	8.6–10
500				5.1–6.4	5.4–6.8	5.8–7.2	6.7–8.4	8.8–11
400					5.7–7.1	6.1–7.6	6.9–8.6	9.0–11
300						6.5–8.1	7.3–9.1	9.2–11
200							8.0–10	9.8–12
100								11–14
	For Percentages around 10 and 90							
2000	1.9–2.4	2.3–2.9	2.6–3.2	3.0–3.8	3.3–4.1	3.7–4.6	4.4–5.5	
1000		2.7–3.4	3.0–3.8	3.3–4.1	3.6–4.5	4.0–5.0	4.6–5.8	
700			3.2–4.0	3.5–4.4	3.8–4.8	4.1–5.1	4.8–6.0	
500				3.8–4.8	4.0–5.0	4.4–5.5	5.0–6.2	
400					4.2–5.2	4.6–5.8	5.2–6.9	
300						4.9–6.1	5.5–6.9	
200							6.0–7.5	
	For Percentages around 5 and 95							
2000	1.4–1.8	1.7–2.1	1.9–2.4	2.2–2.8	2.4–3.0	2.7–3.4		
1000		1.9–2.4	2.1–2.6	2.4–3.0	2.6–3.2	2.9–3.6		
700			2.3–2.9	2.6–3.2	2.7–3.4	3.0–3.8		
500				2.8–3.5	2.9–3.6	3.2–4.0		
400					3.1–3.9	3.3–4.1		
300						3.6–4.5		

TABLE 14.1.III Example of Sampling Errors of Differences between Percentages

The values shown are the differences required for significance (two standard errors) in comparisons of percentages derived from *two different subgroups* of the survey. Two values—low and high—are given for each cell.

These generalized and approximate values of $2\,\text{se}\,(p - p')$ represent the results of many computations. The low values are merely $2[PQ(1/n + 1/n')]^{1/2}$, corresponding to two simple random samples. The high values are about 1.25 greater. Most of the actually computed values of the standard error fell between these two boundaries. (*Source:* Freedman, Whelpton, and Campbell [1959].)

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[1] Leslie Kish, Survey Sampling. New York: John Wiley and Sons, Inc., 1965, p. 580.

EDUCATION AND TAX LIMITATIONS:
EVIDENCE FROM MASSACHUSETTS' PROPOSITION 2½

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EDUCATION AND TAX LIMITATIONS:
EVIDENCE FROM MASSACHUSETTS' 1980 ELECTION

On November 4, 1980 Massachusetts voters overwhelmingly passed Proposition 2 1/2. This tax limitation measure takes its name from its major provisions: high tax rate cities and towns are required to reduce property tax levies by at least 15 percent per year until they reach the maximum allowable rate of 2 1/2 percent of fair market value. Communities with low tax rates are allowed to raise property taxes but by no more than 2 1/2 percent per year. In the same election, voters turned down by a 36 to 64 percent margin an alternative measure, Question 3, sponsored by the Massachusetts Teachers' Association (MTA). This alternative would have limited the growth of both state and local taxes and increased the state share of education costs to 50 percent over a three-year period.

How local public education should be financed was clearly a major issue in the vote on Question 3. Education issues also influenced the vote on Proposition 2 1/2, however, even though its major thrust was property tax reduction. After all, property taxes provide the major source of funds for elementary and secondary education, education budgets account for the largest share of local expenditures, and the measure specifically returned the power to set school budgets to the municipality. What specific messages were voters trying to send when they voted for Proposition 2 1/2 but against Question 3? Did they want to reduce education services and spending? Or was local control over school budgets the major concern?

This paper uses survey data collected during the two weeks following the November 4, 1980 election to answer these and other questions related to the link between views about education and support for tax limitation. Section I describes the provision and financing of education in Massachusetts; Section II disentangles the effects of education-related motivations from other factors motivating the votes on Proposition 2 1/2 and Question 3; Section III describes how views about education are distributed across various subgroups of the population; and Section IV summarizes the findings.

I. BACKGROUND

Education Spending and Finance in Massachusetts

Elementary and secondary education in Massachusetts is provided by local school districts and financed heavily by local property taxes, while higher education is primarily a state responsibility financed by tuition and state taxes. In FY 1981 the state government appropriated $333 million for higher education, and about three times that amount for assistance to local public schools. Altogether, local, state and federal expenditures on local public schools in FY 1981 exceeded $2.25 billion.

The boundaries of school districts are typically coincident with those of Massachusetts' 351 cities and towns. The school districts are run by elected school committees and have no taxing power of their own. Before Proposition 2 1/2, cities and towns had no direct control over school committee budgets but were required to raise the necessary school property taxes as part of the regular municipal levy. Proposition 2 1/2 reduced the fiscal autonomy of school committees by giving local legislative bodies (city councils or town meetings) power to alter school committee budgets.[1]

In addition to the 297 cities and towns that operate instructional programs, there are 54 regional academic school districts and 27 vocational districts. Before Proposition 2 1/2, school committees for each of these regional and vocational districts determined the budget and allocated costs among member communities according to agreements made at the time the district was formed. Proposition 2 1/2 limits the fiscal autonomy of these regional school committees in the same way that it limits the power of local school committees.[2]

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[1] The Massachusetts Department of Revenue has ruled that school committees lose control over only the total appropriation; they retain control over the allocation of expenditures across categories.

[2] The treatment of regional school districts under Proposition 2 1/2 was initially unclear. The issue was whether they should be treated like special districts or like local schools. The Department of Revenue ruled that they should be treated like local schools.

Tremendous variation exists in fiscal capacity, property tax burdens, and education spending across school districts. An equalizing state aid program helps to offset some of the differences in fiscal capacity and needs across districts, but school aid in Massachusetts accounted for only 37 percent of total state and local own-source revenues for schools in 1980. This contrasts with 52 percent in the nation as a whole. Consequently, disparities in per pupil education spending are larger in Massachusetts than elsewhere.[1] These disparities have led to continued pressures for additional state aid for education and, recently, to a court case (Webbe v. King) challenging Massachusetts' system of education finance.

Table I shows that local education expenditures have continued to grow in recent years despite declining enrollments; between 1975-76 and 1979-80, total expenditures grew 29 percent while the number of pupils declined by 13 percent. Moreover, the 47 percent growth in per pupil expenditures during this period represents substantial growth in real terms.[2]

Some have blamed the increase in per pupil spending on the autonomy of school committees. This claim is difficult to evaluate. On the one hand, school committees are elected and, like other public officials, are directly accountable to the voters. On the other hand, with autonomous school committees, local legislative bodies are unable to make explicit trade-offs between education and all other spending.

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[1] 1977 data from the National Center for Education Statistics shows that the disparity between per pupil expenditures for pupils at the 5th and 95th percentiles of education spending was larger in Massachusetts than in any other state. The newly revised school aid program of 1979 does not seem to have changed the situation. In 1981 testimony before the House Ways and Means Committee, former Education Commissioner Gregory Anrig claimed that Massachusetts continued to rank first in the nation for differences in per pupil spending between wealthy and poor communities.

[2] This statement is based on the comparable 35 percent increase in the implicit price deflator for state and local government purchases of goods and services. Economic Report of the President, January 1981 (Washington, D.C., United States Government Printing Office, 1980).

Table I

EDUCATION EXPENDITURES

School year	Expenditures (millions)	Pupils	Per pupil Expenditures
1975-76	$1,761.1	1,177,536	$1,496
1976-77	1,943.6	1,146,839	1,695
1977-78	2,005.0	1,107,174	1,811
1978-79	2,148.1	1,078,550	1,992
1979-80	2,276.7	1,032,691	2,205
Percent change	29.3%	-12.3%	47.3%

Source: Massachusetts Department of Education, Per Pupil Expenditure 1979-80.

Others have blamed rising per pupil expenditures on state-mandated programs for children with learning disabilities. Massachusetts pioneered in the field of special education with a 1972 law requiring local school districts to provide special education services for all children who needed it. Expenditures under this program grew from $104 million in 1973-74 to $335 million in 1979-80. Between 1975 and 1978, a substantial share of this growth in costs was financed with local property taxes. With the 1979 revision of the school aid formula, the growth in costs is now distributed more evenly between the state and local governments. In 1979-80, 60 percent of total expenditures for special education were borne by local governments, 33 percent by the state government, and 7 percent by the federal government.

Tax Limitation Measures and Education

Proposition 2 1/2's revenue provisions affect all cities and towns, and hence school districts, in the state but hurt some more than others. High tax rate communities are required to lower tax levies by 15 percent per year until they reach the maximum allowable effective rate of 2 1/2 percent (equivalent to $25 per $1000 of full cash value). Communities with tax rates below 2 1/2 percent are allowed to increase tax levies but by no more than 2 1/2 percent per year, regardless of growth in the tax base or in service needs.[1] In addition, Proposition 2 1/2 lowers the motor vehicle excise tax rate from $66 to $25 per $1000. This tax is imposed at a uniform statewide rate but accrues to local treasuries. Along with the local property tax it provides the only tax revenue available to Massachusetts cities and towns.

Initial estimates suggested that the first year revenue loss from these measures would be close to $600 million. July 1, 1981 estimates lowered the expected first year revenue loss to $486 million, or about 14 percent of 1981 local tax revenues. All large cities and towns face first year revenue losses larger than this statewide average, and many face additional required reductions in future years.[1] Importantly, the proposition provided for no additional state aid to offset these local revenue losses. At the same time, new state aid was not ruled out because the proposition placed no limit on state government taxing and spending powers.

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[1] An additional provision requires communities that had effective tax rates below 2 1/2 percent in 1979 to use their 1979 tax rate limit rather than 2 1/2 percent.

In response to the threat of Proposition 2 1/2, the Massachusetts Teachers' Association (MTA) put a counter-proposal on the November ballot. This initiative petition would have limited the growth of both state and local taxes to the growth of personal income in the state and would have increased the state's share of education costs to 50 percent over a three-year period. With this proposal, the MTA hoped either to weaken support for Proposition 2 1/2, or if both passed, to have the more lenient provisions of its proposal take precedence over the stringent provisions of Proposition 2 1/2 in those areas where the two overlapped. Once the campaign began, however, the MTA did not push its proposition very hard, believing that a single unified message (that is, do not vote for Proposition 2 1/2) would be stronger than two messages (do not vote for Proposition 2 1/2 and do vote for the MTA proposal).[2]

Education groups waged an active campaign against Proposition 2 1/2. The State Board of Education worked with the Massachusetts Teachers' Association, the Massachusetts Superintendents, and the Association of School Committees to provide information to voters. The Commissioner of Education campaigned vigorously across the state and education groups communicated constantly with other groups campaigning against the measure. The Commissioner of Education took pride in the campaign. Although sorrowful that "we lost," he believed it was a good campaign, that the voters were fully informed, and that Proposition 2 1/2 clearly reflected the "will of the people."[3]

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[1] For a full discussion of the first year revenue losses under Proposition 2 1/2, see Katherine L. Bradbury and Helen F. Ladd, with Claire Christopherson, "Proposition 2 1/2: Initial Impacts."

[2] This discussion is based on an interview with Jack Pacheco of the Massachusetts Teachers Association on August 28, 1981.

[3] Based on an interview with former Commissioner of Education, Gregory Anrig, June 11, 1981.

II. EDUCATION ISSUES AND THE VOTES ON PROPOSITION 2 1/2 AND QUESTION 3

To determine the "will of the people," a comprehensive half-hour telephone survey was administered to 1561 Massachusetts household heads by a professional survey research firm during the two weeks following the election. Survey respondents, half of whom were men and half women, were randomly selected from 58 cities and towns that are representative of all the cities and towns in the state.[1]

This section summarizes the education-related results from two multivariate models of voting behavior estimated from the survey data. Each model--one explaining the vote on Proposition 2 1/2 and the other explaining the vote on Question 3--includes variables representing the major factors motivating a "yes" or "no" vote on that measure. The comprehensiveness of each model makes it possible to separate the effects of education issues from other policy-related issues that might have motivated the vote.

Table II provides an overview of the model explaining the vote on Proposition 2 1/2. The model includes variables representing voters' preferences and attitudes toward several fiscal concerns, as well as expectations about how Proposition 2 1/2 would affect these concerns. Estimated using ordinary least squares, the equation includes 45 variables and is based on the 1114 voters for whom full information was available.[2] This full model includes nine education-related variables derived from respondents' stated preferences, perceptions or expectations about levels of education services and spending, the efficiency with which school services are provided, and the way education is financed.

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[1] For a complete description of the survey and the sampling plan, see Appendices A, B and C of Helen F. Ladd and Julie Boatright Wilson, "Proposition 2 1/2: Explaining the Vote."

[2] The full equation is reported in Appendix A and discussed more fully in Helen F. Ladd and Julie Boatright Wilson, "Why Voters Support Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2."

Table II

Overview of Proposition 2½ Voting Model

	Variables	
Issues Motivating Voting Behavior (1)	Preferences, Perceptions and Attitudes (2)	Expectations about Effects of Proposition 2-1/2 (3)
1. Service levels	Preferences for clusters of services	Expected effects on clusters of services; expected effects on services used by respondent's household.
2. Inefficiency and waste (cost of public services)	Perceptions of inefficiency or waste in: - state government - local government - local public schools	Expectations of more responsible government, more efficiency in local government, more voter control over schools.
3. Spending and taxes	Desired spending and taxing by: - state government - local government - local public schools	Expected effects on state and local taxes; expected effects on taxes paid by respondent's household.
4. Tax reform (tax shift)	Desired tax shifts. Attitudes toward taxes.	Expectations about state aid and about tax reform.
5. Relative fiscal status	Perceptions of how other groups fare relative to household.	---------
6. Public sector job status	----------	Public sector employee as proxy for fear of job loss or decline in quality of work environment.

Most of the education-related variables exert statistically significant effects on the probability that an individual household head will support Proposition 2 1/2. In particular, the equation implies that the desire to reduce the quality and quantity of education services, the belief that education services are inefficiently provided, the desire to shift more of the burden of education finance to state taxes or user charges and the expectation that Proposition 2 1/2 would increase voter control over school budgets all increase the probability that any given voter would support the tax limitation measure.

The contribution of each variable to the overall statewide vote of household heads depends both on the effect of the particular variable on the probability that an individual household head would support Proposition 2 1/2 and on the distribution of that variable across household heads within the state. For example, the equation shows that people who want to reduce education services are more likely than those who want to maintain or increase these services to vote "yes" on Proposition 2 1/2; the impact of these preferences on the overall statewide vote is small, however, because of the small proportion of people wanting such reductions. The first entry in Table III shows that the estimated magnitude of this impact is 0.8 percentage points. In other words, the results imply that the favorable vote for Proposition 2 1/2 would have been 0.8 percentage points lower than the actual vote had no Massachusetts household head wanted to reduce education (and recreation) services.

The other entries in Table III can be interpreted in a similar way. Together they show the impacts on the statewide vote for Proposition 2 1/2 of all the education-related variables in the full model, controlling for all other motivations. They were derived by comparing the voting outcome based on the actual distributions of views with the voting outcomes predicted to occur had no one wanted or expected any change in each aspect of education finance or service delivery. Thus, the total in the net column implies that, overall, the education-related views of household heads throughout the state

Table III

SUMMARY OF WEIGHTED IMPACTS OF EDUCATION VARIABLES ON TOTAL PROPOSITION 2½ VOTE[a]

Variable	Weighted Impact on Total Vote		
	For	Against	Net
Service Levels[b]			
Preferences for education and recreation--less	0.008		
--more		-0.015	-0.007
Expectations about education and recreation--less		-0.061	
--more	0.001		-0.060
Spending			
Want decrease in school spending	0.023		0.023
Expect decrease in school spending		-0.041	-0.041
Efficiency and Control			
Perception of inefficiency in local schools	0.031		0.031
Expect more voter control over school spending	0.090		0.090
Finance Reform			
Shift of more education financing to state taxes	0.016		0.016
Shift of more special education financing to state taxes	0.005		0.005
Shift financing of some services to user charges[c]	0.015		0.015
	0.189	-0.117	0.072

Table III, continued

[a] Derived from the nine education-related variables included in a linear equation estimated from 1,114 survey observations to explain the probability of a "yes" vote on Proposition 2 1/2. Each entry is the predicted difference between the actual statewide vote of household heads and the hypothetical vote had no household head wanted or expected a change in that aspect of education, controlling for all other variables in the model. The full model is reported and interpreted in Helen F. Ladd and Julie Boatright Wilson, "Why Voters Support Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2" in Tax Limitations in Massachusetts, unpublished report to the National Institute of Education, 1982.

[b] Education and recreation is the primary education-related service cluster. Not included in this table is the human services cluster which includes special education along with mental health programs and programs for the elderly.

[c] These services include adult education, after school programs, and local public transportation.

contributed 7.2 percentage points to the 58 percent favorable vote on Proposition 2 1/2.[1]

Several conclusions emerge from Table III. First, the finding that views on education-related issues together contributed only 7.2 percentage points to the favorable vote suggests that the vote for tax limitation in Massachusetts should not be interpreted as a general revolt against local schools and the way they are operated. Disaggregating this net impact, however, shows that certain views toward education contributed 18.9 percentage points to the favorable vote, while others contributed 11.7 percentage points to the negative vote. More than half the 18.9 percentage points of support for Proposition 2 1/2 comes from perceptions and expectations related to efficiency and voter control; beliefs that Proposition 2 1/2 would lead to more voter control over school spending contributed 9.0 percentage points to the favorable vote, and perceptions that local school services are inefficiently provided contributed another 3.1 percentage points.

In contrast to the large contribution of views about efficiency and voter control, desires for lower levels of spending or services contributed only small amounts to the statewide favorable vote. The desire for lower education and recreation services added only 0.8 percentage points to the favorable vote and the desire to reduce school spending, as distinct from service levels, contributed another 2.3 percentage points. As shown at the bottom of the table, the desire to change the way locally provided education is financed in Massachusetts also contributed to the favorable vote, but once again the impacts are relatively small. Although not shown explicitly in the table, the desire to shift the financing of special education services to the state contributed essentially nothing to the statewide vote for Proposition 2 1/2.

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[1] The statewide actual favorable vote was 59 percent. The 58 percent used in the text is the favorable vote in the sample which represents an estimate of the statewide favorable vote of household heads.

Finally, Table III shows that concern about service or spending cutbacks contributed 11.7 percentage points to the vote against Proposition 2 1/2. This finding is consistent with the view that the campaign to educate voters about the possible cuts in education services that would accompany Proposition 2 1/2 had some effect. Importantly, the negative impact on the vote of those who opposed service or spending reductions outweighed the positive impact of those who wanted them.[1]

Summarizing these results, it appears that the education-related favorable vote for Proposition 2 1/2 is not, on net, a vote for reductions in school spending or service levels. Instead, the favorable vote reflects expectations of more voter control over school spending and, to a limited extent, the desire for changes in the way education is financed in Massachusetts.

The model explaining the vote on Question 3 is conceptually similar to that estimated for Proposition 2 1/2, but is based on a substantially smaller subsample and, because the goals of the two tax limitation measures differed, contains different variables measuring expected outcomes.[2] The smaller sample primarily reflects the fact that only a subset of all respondents were asked what they thought would have happened to taxes and services if the measure had passed. The estimated equation contains 32 variables and is based on the 315 voters for whom full information was available.[3]

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[1] This is interesting in light of preliminary findings that education budgets were cut back proportionately more than other budgets during the first year under the proposition. See Katherine L. Bradbury and Helen F. Ladd, with Claire Christopherson, "Proposition 2 1/2: Initial Impacts."

[2] Because Question 3 would have limited the growth of state and local taxes rather than actually reducing them, detailed information on expected cutbacks in specific services or on expected increases in efficiency was not collected. Likewise, because the measure did not restrict the power of local school committees, respondents were not asked how Question 3 would affect voter control.

[3] For the complete Question 3 voting model, see Appendix A. The characteristics of the subsample on which the model is based are described in Appendix C of Ladd and Wilson, "Proposition 2 1/2: Explaining the Vote."

The full Question 3 model includes seven education-related variables. Although the equation explains the vote relatively well, many of the variables are statistically insignificant.[1] Of these seven education-related variables, only one--the expectation that Question 3 would have led to more school spending--is statistically significant. The coefficient of this variable implies that those who expected Question 3 to lead to more school spending were 19 percentage points more likely to vote "yes" than those who did not expect this outcome. Additional evidence that supporters of Question 3 viewed the measure as a way of expanding, rather than limiting, the resources available to local public schools is based on a relatively large but statistically insignificant coefficient that people preferring cuts in education spending were more likely than others to vote against the measure.

The following expectations variables all enter the Question 3 voting model with large positive and statistically significant coefficients: the expectation of state tax reform, of slower growth in property taxes, and slower growth in total taxes and spending. Thus, the conclusion emerges that supporters of Question 3 were in favor of slower growth of property and total taxes while at the same time they favored increased education spending.

Finally, the equation shows that even after controlling for their preferences and expectations, local public sector employees were substantially more likely than private sector employees to support Question 3. Similarly, the equation suggests that voters with a household member employed in local public schools were more likely than private sector employees to support Question 3. The statistical insignificance of this result should not be taken too seriously; only

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[1] Using a cutoff probability of 0.5, the equation correctly predicts the vote of 80 percent of the sample. This compares to the 53 percent $[(0.36)^2 + (0.64)^2]$ that would have been correctly predicted by chance or to the 64 percent that would have been correctly predicted had a no vote been predicted for everyone.

12 of the 315 voters in the sample had a household member working in local public schools.[1]

Comparing the models for Proposition 2 1/2 and Question 3, we conclude that support for each measure came from groups of the population holding very different views on education-related issues. This conclusion is reinforced by a simple comparison of the views of each measure's supporters (see Appendix Tables B-I through B-V). The supporters of Question 3 typically expected the measure to lead to their preferred outcome of more spending on education. Proposition 2 1/2's supporters, in contrast, were more likely than Question 3's supporters to prefer lower levels of school services, to believe that local education is inefficiently provided and to expect Proposition 2 1/2 to lead to increased control over school spending.

The passage of Proposition 2 1/2 and the defeat of Question 3, however, should not be interpreted as widespread disenchantment with local public education. Indeed, the next section shows that at the time of the election, the average Massachusetts household head wanted to maintain most types of education services at their current levels, did not perceive pervasive inefficiency in the delivery of education services, and was not dissatisfied with the way elementary and secondary education--other than that for special needs students--was financed.

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[1] Looking at the larger sample of all those who voted on Question 3 rather than those for whom complete data are available for the equation, we find that 53.2 percent of the 96 voters with a household member employed in education and 55.0 percent of the 121 voters with a household member working for local government voted in favor of Question 3. The comparable percentages for Proposition 2 1/2 are 29.2 and 31.8 percent, respectively.

III. VARIATIONS IN PREFERENCES ACROSS POPULATION SUBGROUPS

While a majority of household heads were satisfied with most aspects of education finance and service delivery, substantial proportions were disenchanted with particular aspects. This section summarizes the education-related views of all survey respondents (both voters and non-voters), and documents differences among subgroups defined by socio-economic, fiscal and attitudinal characteristics.[1]

The cross-tabular analysis presented below is well suited to the determination of which groups are most disenchanted with particular aspects of local public education. More complex multivariate analysis would be required, however, to explore why particular patterns emerge. Thus, when we find that high income households are more likely than low income households to want service reductions, we do not know whether this is because they are more likely to be homeowners with large property tax burdens, they live in communities with high existing service levels, or they are better able to afford private sector alternatives. Thus, the purpose of the following discussion is to document patterns, leaving the more complicated task of sorting out motivationsto future research.[2]

Service Levels

Only a small proportion of all respondents wanted to reduce the level of any of the five education services included in the survey--public elementary and high school education; after school programs; special education for children with learning disabilities; adult education; and state or community colleges. Table IV shows that the proportions wanting cutbacks range from 11 percent for special

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[1] For a comparison of the views of those voting "yes" with those voting "no" on Proposition 2 1/2 and a comparison of views about education with those about other public services, see Ladd and Wilson, "Proposition 2 1/2: Explaining the Vote." See also Appendix C of this report for respondents' expectations of how Proposition 2 1/2 would affect education, by demographic group.

[2] For a discussion of the significance of differences between any two groups, see Appendix D.

Table IV

PREFERENCES FOR FIVE EDUCATION SERVICES[a]

All Respondents

Service Type	Percent of all respondents who want to: Decrease the service[b]	Maintain the service at current level	Increase the service[c]
Public Elementary and High School Education	17.1%	44.3%	38.6%
After School Programs	22.8	46.2	31.0
Special Education	11.1	34.0	54.9
Adult Education	18.0	54.4	27.5
State and Community Colleges and Universities	17.1	54.1	28.2

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[a] Based on the question: "Think about the services provided by the state or local government to residents of your town or city. For each service I read, please tell me whether state or local government should be providing a lot less, a little less, the same amount, a little more, or a lot more of this service. Remember, if government provides less services state or local taxes will be reduced, and if government provides more services, state or local taxes will be increased. If the service is not available to residents in your city or town, please let me know. Let's begin with ("X'd ITEM). Which phrase in the first list describes how much more or less ("X'd" ITEM) state or local government should provide?"

[b] Includes those who want to decrease services "a little" and "a lot."

[c] Includes those who want to increase services services "a little" and "a lot."

education to 23 percent for after school programs. Because these percentages are so low, we begin our disaggregate analysis by looking at variations in the proportions wanting to increase services. These proportions range from 28 percent for adult education to 55 percent for special education.

Table V shows that the proportions of respondents wanting more education services vary across the subgroups in most of the demographic categories examined. Women were substantially more likely than men, and non-whites more likely than whites, to want higher levels of each of the five services. In contrast, the differences by religion are much smaller and less consistent across service types. In particular, the evidence does not support the hypothesis that the availability of Catholic private schools makes Catholics less supportive than non-Catholics of public education.

A clear pattern emerges by stage in life-cycle. In general, older households with no school-age children were less likely than younger households to want more education services. In particular, less than a third of the older households with no children or of the elderly wanted more of any service other than special education. Interestingly, greatest support for particular services came from the households that were likely to use the service in the near future; households with pre-school children were the most likely to want more public education, after-school programs and special education, and those with children between 6 and 17 were most likely to want more publicly supported higher education.

Overlapping the stage in life-cycle categories are the service usage categories. As expected, those who report that members of their household use the service were more likely than non-users to support increases. The relative narrowness of some of these differences can be explained in part by the life-cycle findings: "non-users" include many households who will use the service in the future.

Table V

PREFERENCES FOR INCREASES IN FIVE EDUCATION SERVICES[a,b]
By Demographic Characteristics

	Percent of respondents in each category who want to increase:				
	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Total	38.6%	31.0%	54.9%	27.5%	28.2%
Sex					
Female	44.6	36.4	57.5	30.2	31.6
Male	32.5	25.6	52.3	24.8	24.9
Race					
Non-white	54.7	46.8	66.7	35.4	41.1
White	37.5	30.0	54.2	27.0	27.3
Religion					
Catholic	39.4	30.9	58.3	28.8	28.8
Jewish	36.4	32.2	53.4	18.0	26.4
Protestant	36.4	33.0	51.0	28.5	28.4
Other, no religion	40.5	27.6	51.8	25.3	26.6
Stage in Life Cycle					
Young, no children	44.2	36.9	64.5	36.5	32.9
Children present, oldest <6	48.0	38.5	66.7	27.7	27.9
Children present, oldest 6-17	40.3	30.7	49.6	24.5	30.6
Older adults, no children	31.5	27.6	50.2	25.2	24.9
Elderly (60+) adults, no children	28.2	21.9	50.7	24.7	20.3
Service Usage					
Use this service	41.6	32.4	61.1	32.9	34.2
Do not use this service	37.0	30.6	54.3	26.1	26.5

Table V (continued)

PREFERENCES FOR INCREASES IN FIVE EDUCATION SERVICES[a,b]
By Demographic Characteristics

	Percent of respondents in each category who want to increase:				
	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Education					
Less than high school	48.1%	40.5%	65.6%	31.5%	37.6%
High school degree	39.9	30.0	59.7	30.5	28.7
Some college	36.2	30.9	50.3	26.9	27.4
College degree	35.2	27.1	49.4	23.6	24.7
Graduate school	33.9	30.1	47.4	22.3	24.0
Household Income					
Less than $10,000	50.3	43.6	71.2	37.6	35.2
$10,000 to <$20,000	41.0	34.8	60.9	28.3	30.6
$20,000 to <$30,000	38.0	26.7	50.3	27.6	26.6
$30,000 to <$50,000	30.8	25.4	45.9	22.8	24.5
$50,000 or more	30.9	29.2	43.3	23.1	14.5
Occupation of Household Head					
Professional	36.9	30.1	50.7	26.2	24.7
Managerial	34.4	26.6	47.6	21.3	24.1
Clerical, sales	36.2	32.1	56.1	28.6	33.9
Blue collar	40.7	29.7	59.4	29.7	29.3
Service	50.5	42.7	69.5	33.6	32.0
Not reported	39.8	36.3	56.2	31.0	32.7
Government Employee					
Educational employee	49.5	37.2	48.9	22.4	34.8
Local government employee	45.4	37.8	53.8	28.3	26.7
State government employee[c]	42.9	38.9	59.3	29.1	35.7
Federal government employee	40.3	27.0	62.5	29.7	38.6
No local, state, or federal employees in household	36.8	29.7	54.9	27.6	27.5

Table V (continued)

PREFERENCES FOR INCREASES IN FIVE EDUCATION SERVICES[a,b]
By Demographic Characteristics

	Percent of respondents in each category who want to increase:				
	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Local Tax Share					
Owners: Less than 75% of community avg.	31.1	25.3	52.9	23.1	25.3
Owners: 75% to <100% of community avg.	34.7	25.5	43.0	18.7	24.7
Owners: 100% to <125% of community avg.	30.9	24.0	46.8	26.3	24.6
Owners: 125% or more of community avg.	25.6	20.3	39.2	16.3	17.2
Owners: Taxes not reported	37.2	27.4	53.1	31.9	27.4
Renters: never owned, no plans to own	48.4	44.9	65.2	36.3	33.6
Renters: Ever owned	53.4	39.2	67.6	40.3	38.6
Renters: Plan to own	45.0	30.8	59.2	29.2	23.3
Neither rent nor own	27.9	34.9	67.4	16.3	23.2
Political Ideology					
Very conservative	35.4%	28.9%	56.1%	31.6%	23.1%
Fairly conservative	36.8	28.3	50.0	25.5	25.4
Middle of the road	34.7	27.8	53.0	23.6	25.8
Fairly liberal	43.8	36.5	60.2	31.2	35.9
Very liberal	56.4	51.0	67.6	40.8	44.4

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[a] Based on the question: "Think about the services provided by the state or local government to residents of your town or city. For each service I read, please tell me whether state or local government should be providing a lot less, a little less, the same amount, a little more, or a lot more of this service. Remember, if government provides less services state or local taxes will be reduced, and if government provides more services, state or local taxes will be increased. If the service is not available to residents in your city or town, please let me know. Let's begin with ("X'd ITEM). Which phrase in the first list describes how much more or less ("X'd" ITEM) state or local government should provide?"

[b] Each entry is the percentage of respondents that think there should be a "lot more" or a "little more" of that particular service. Percentages are based on those responding to the question.

[c] "State government employee" includes county employees.

With only a few exceptions, support for higher levels of each service decreases both with the amount of education received by the respondent and with household income. In addition, households headed by managers are least likely and those from households headed by service workers are most likely to want higher education service levels.

Respondents from households having at least one member employed by a local public school are more likely than other households to want higher levels of elementary and secondary education. These respondents are no more likely than those from households having non-school state or local public employees, however, to want more of the other four education services. Interestingly, respondents living in households having a federal government employee have the highest probabilities of all groups of wanting more special education, adult education and publicly supported higher education.

The tax share findings are roughly consistent with the hypothesis that respondents with low tax shares are more likely than others to want higher service levels. Among homeowners, the percentage wanting higher service levels generally decreases with the household's share of the tax burden, but the differences are small and the patterns are not consistent. Renters, particularly those who have no immediate plans to purchase a home, were more likely than homeowners to want more of each service. Presumably, this group of renters believes that they pay little or no local property taxes.

Finally, those who describe themselves as liberals express greater preference than others for increasing education services. Somewhat surprisingly, conservatives are no less likely and, in the case of special education and adult education, are more likely than those claiming to be middle-of-the-roaders to want to increase education services.

Table VI looks at the other side of the coin, i.e., variations in desired cutbacks. In most cases, the patterns are the reverse of

Table VI

PREFERENCES FOR CUTTING BACK FIVE EDUCATION SERVICES^{a,b}
By Demographic Characteristics

	Percent of respondents in each category who want to cut back:				
	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Total	17.1%	22.8%	11.1%	18.0%	17.6%
Sex					
Female	12.6	19.5	6.9	12.8	13.8
Male	21.5	26.0	15.4	23.4	21.4
Race					
Non-white	15.8	17.0	6.4	15.6	10.5
White	17.2	23.1	11.4	18.2	18.2
Religion					
Catholic	15.6	21.4	10.1	18.5	18.3
Jewish	15.9	14.9	11.4	21.4	14.9
Protestant	17.3	23.8	11.2	13.8	16.0
Other, no religion	21.8	27.6	14.1	22.9	19.8
Stage in Life Cycle					
Young, no children	13.9	16.9	9.0	14.3	15.1
Children present, oldest <6	13.6	18.4	5.6	15.2	18.0
Children present, oldest 6-17	16.9	23.8	13.2	20.2	14.1
Older adults, no children	23.4	26.3	14.9	21.3	21.2
Elderly (60+) adults, no children	16.8	27.4	8.8	16.0	24.9
Service Usage					
Use this service	16.6	18.4	4.6	13.0	10.5
Do not use this service	17.4	23.8	11.7	19.4	19.6

VI (continued)

PREFERENCES FOR CUTTING BACK FIVE EDUCATION SERVICES[a,b]

By Demographic Characteristics

	Percent of respondents in each category who want to cut back:				
	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Education					
Less than high school	15.4%	20.5%	6.7%	12.8%	14.2%
High School degree	18.2	22.3	6.4	17.6	17.8
Some college	17.7	25.1	11.4	18.5	15.5
College degree	16.4	22.9	17.0	19.2	21.5
Graduate school	16.4	22.0	19.1	22.3	18.9
Occupation of Household Head					
Professional	13.6	23.2	14.8	18.4	18.4
Managerial	24.8	24.2	16.2	24.7	18.3
Clerical, sales	16.0	19.2	10.0	13.8	17.2
Blue collar	17.6	24.8	7.9	16.7	17.4
Service	8.6	11.6	1.0	12.5	15.0
Not reported	16.8	25.0	9.3	16.8	18.0
Government Employee					
Educational employee	5.4	17.0	20.2	14.9	11.2
Local government employee	14.3	13.4	10.1	15.0	12.1
State government employee[c]	14.3	13.0	11.1	12.7	21.4
Federal government employee	25.8	30.2	10.9	31.3	17.5
No local, state, or federal employees in household	18.0	24.2	10.5	18.1	18.6
Household Income					
Less than $10,000	12.6	15.2	3.8	10.5	16.4
$10,000 to <$20,000	15.5	18.9	7.0	13.2	15.9
$20,000 to <$30,000	19.0	26.7	13.8	19.9	18.2
$30,000 to <$50,000	19.0	26.8	16.0	25.1	17.4
$50,000 or more	20.6	21.5	17.9	24.6	33.9

Table VI (continued)

PREFERENCES FOR CUTTING BACK FIVE EDUCATION SERVICES[a,b]

By Demographic Characteristics

	Percent of respondents in each category who want to increase:				
	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Local Tax Share					
Owners: Less than 75% of community avg.	15.8%	25.1%	8.6%	16.4%	14.7%
Owners: 75% to <100% of community avg.	19.8	26.4	14.3	25.6	21.0
Owners: 100% to <125% of community avg.	20.0	24.7	17.2	21.5	24.1
Owners: ≥125% of community avg.	21.5	27.3	18.6	24.9	21.9
Owners: Taxes not reported	26.1	25.2	12.8	18.9	15.2
Renters: never owned, no plans to own	13.0	13.1	6.1	8.6	12.4
Renters: Ever owned	10.9	16.8	5.1	12.2	13.9
Renters: Plan to own	12.0	26.1	8.6	16.7	22.3
Neither rent nor own	14.6	22.5	0.0	12.2	7.5
Political Ideology					
Very conservative	20.8	28.1	12.9	23.3	29.2
Fairly conservative	20.6	28.8	16.0	23.7	18.8
Middle of the road	17.5	21.3	11.1	17.3	15.6
Fairly liberal	13.8	18.6	6.7	13.2	16.5
Very liberal	5.9	14.7	1.0	10.2	12.1

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[a] Based on the question: "Think about the services provided by the state or local government to residents of your town or city. For each service I read, please tell me whether state or local government should be providing a lot less, a little less, the same amount, a little more, or a lot more of this service. Remember, if government provides less services state or local taxes will be reduced, and if government provides more services, state or local taxes will be increased. If the service is not available to residents in your city or town, please let me know. Let's begin with ("X'd ITEM). Which phrase in the first list describes how much more or less ("X'd" ITEM) state or local government should provide?"

[b] Each entry is the percentage of respondents that think there should be a "little less" or a "lot less" of that particular service. Percentages are based on those responding to the question.

[c] "State government employee" includes county employees.

of those for desired increases. Support for cutbacks is higher among respondents who are male, white, better educated or conservative than among those who are female, non-white, less well educated or liberal. In addition, support for cutbacks is higher among respondents whose households are older with no children, do not use the service, are headed by a managerial worker, have higher household income, and own their own home, compared with respondents who are young, use the service, whose household head is a service worker, have low incomes, or who rent.

Not surprisingly, only five percent of respondents in households with a worker in the local public schools wanted to reduce elementary and secondary education services. At the same time, however, 20 percent of these respondents--in contrast to 10 percent of other groups--wanted to reduce special education. As shown below, part of this difference in views about special education may reflect differing perceptions of how efficiently the services are provided. More generally, these findings indicate that at least some educational employees would like to reverse the recent trend of growth in special education services at the expense of regular education.

Spending Levels

This section looks at desired changes in spending for local public education, in contrast to desired changes in service levels. The next section then discusses respondents' perceptions of the link between spending and service levels.

Table VII shows that 44 percent of the respondents wanted to decrease school spending, 36 percent wanted to keep it the same, and 20 percent wanted to increase it.[1] Thus, a relatively large proportion of Massachusetts household heads, including the "middle" or average respondent, was content with the pre-Proposition 2 1/2 level of school spending. At the same time, almost half the respondents wanted lower spending even though, as discussed above, a much smaller proportion wanted to reduce service levels.

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[1] Respondents could indicate desired increases or decreases from 1 to 100 percent. "Keeping spending the same" is equivalent to zero percent desired change.

Table VII

DESIRED CHANGES IN SPENDING AND TAXES FOR LOCAL PUBLIC SCHOOLS[a,b]

By Demographic Characteristics

	Local School Spending Should		
	Increase	Stay the Same	Decrease
Total	20.0%	35.6%	44.4%
Sex			
Female	21.7	36.8	41.4
Male	18.4	34.3	47.3
Race			
Non-white	35.4	30.2	34.4
White	19.0	35.9	45.0
Religion			
Catholic	18.5	34.0	47.6
Jewish	23.9	40.2	35.9
Protestant	19.6	37.5	42.9
Other, no religion	24.1	35.4	40.5
Stage in Life Cycle			
Young, no children	34.4	38.1	27.6
Children present, oldest <6	25.6	35.6	38.9
Children present, oldest 6-17	19.7	36.2	44.2
Older adults, no children	11.0	33.7	55.2
Elderly (60+) adults, no children	8.3	33.2	58.5
Service Usage			
Children in public schools	20.4	35.0	44.7
No children in public schools	19.9	35.9	44.2
Education			
Less than high school	23.0	32.0	50.0
High School degree	16.9	35.1	48.0
Some college	20.6	36.3	43.1
College degree	20.6	37.4	42.1
Graduate school	25.0	38.3	36.7

Table VII (continued)

DESIRED CHANGES IN SPENDING AND TAXES FOR LOCAL PUBLIC SCHOOLS[a,b]

By Demographic Characteristics

	Local School Spending Should		
	Increase	Stay the Same	Decrease
Household Income			
Less than $10,000	29.0%	37.9%	33.1%
$10,000 to <$20,000	23.8	32.4	43.8
$20,000 to <$30,000	18.2	33.4	48.4
$30,000 to <$50,000	12.0	41.9	46.2
$50,000 or more	21.7	33.3	44.9
Occupation of Household Head			
Professional	22.6	37.3	40.1
Managerial	14.8	35.0	50.2
Clerical, sales	15.5	41.5	43.0
Blue collar	21.6	31.0	47.5
Service	25.7	37.1	37.1
Not reported	21.5	36.2	42.3
Government Employee			
Educational employee	20.2	41.5	38.3
Local government employee	21.0	27.7	51.3
State government employee[c]	17.5	38.6	43.9
Federal government employee	15.4	36.9	47.7
No local, state, or federal employees in household	20.3	35.7	44.0
Local Tax Price			
Owners: Less than 75% of community avg.	16.0	33.3	47.6
Owners: 75% to <100% of community avg.	12.0	34.3	52.2
Owners: 100% to <125% of community avg.	10.9	36.6	52.6
Owners: 125% or more of community avg.	11.9	33.0	53.7
Owners: No taxes reported	17.7	35.4	46.0
Renters: Never owned, no plans to own	31.6	39.8	28.5
Renters: Ever owned	36.4	32.4	31.2
Renters: Plan to own	25.8	33.3	48.8
Neither rent nor own	16.3	46.5	37.2

Table VII (continued)

DESIRED CHANGES IN SPENDING AND TAXES FOR LOCAL PUBLIC SCHOOLS[a,b]

By Demographic Characteristics

	Local School Spending Should		
	Increase	Stay the Same	Decrease
Political Ideology			
Very conservative	19.3%	30.4%	50.4%
Fairly conservative	15.8	30.8	53.5
Middle of the road	17.7	37.6	44.6
Fairly liberal	25.7	36.5	37.8
Very liberal	37.9	36.9	25.2

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[a] Based on the question: "Compared to what the state government now spends, by what percentage, if any, would you like to see state government taxing and spending increase or decrease? You may answer any percent increase or decrease from 1% to 100% or tell me you want it to stay the same. And by what percentage, if any, would you like to see local government taxing and spending increase or decrease. And by what percentage, if any, would you like to see local public school taxes and spending increase or decrease?"

[b] Percentages are based on those responding to the question and total to 100% across rows.

[c] "State government employee" includes county employees.

At least half the respondents in each of the following groups wanted lower school spending:

- older households with no children, including the elderly;
- respondents with less than a high school degree;
- households headed by someone in a managerial position;
- households with a local government employee;
- households with local tax shares greater than 75 percent of the community average; and
- respondents who are "fairly" or "very" conservative.

The findings confirm that stage in life-cycle is an important determinant of opposition to public school spending, with young childless households providing the least opposition and older households the most. In addition, respondents in households including local school employees are less likely than those in households with or without other public sector employees to want less school spending. This could reflect either above-average preferences for school spending among this group or concern that their household incomes would be adversely affected by spending reductions. Concern about public sector jobs may also account for the large fraction of non-school local public sector employees who want spending reductions; cutbacks in school spending may allow local government to maintain non-school spending and jobs at current levels.

Perceptions of Inefficiency

Respondents' perceptions of inefficiency can partially reconcile their apparently inconsistent desires to reduce spending but not service levels. We measure these perceptions as the percentage by which respondents believe spending can be reduced without appreciable reductions in service levels. Table VIII reports the results in summary form. The first number in each entry indicates the percentage of respondents who believe that spending cuts of less than five percent would significantly affect service levels. The larger this number, the greater the proportion of respondents who believe the service is provided efficiently. The second number in each entry represents the percentage of respondents who believe that spending

Table VIII

BELIEFS THAT SPENDING CAN BE CUT WITHOUT AFFECTING THE QUALITY OR QUANTITY OF VARIOUS EDUCATION SERVICES: POSSIBLE CUTBACKS OF LESS THAN 5 PERCENT/ POSSIBLE CUTBACKS OF 15 PERCENT OR MORE[a,b]

By Demographic Characteristics

	Public Elementary and Secondary Education <5%/≥15%	After School Programs <5%/≥15%	Special Education <5%/≥15%	Adult Education <5%/≥15%	Public Colleges <5%/≥15%
Total	38%/37%	42%/34%	58%/22%	31%/45%	35%/40%
Sex					
Female	41/36	42/36	58/22	32/46	35/41
Male	36/39	42/33	57/21	31/43	34/40
Race					
Non[illegible]hite	41/35	39/39	60/22	34/45	35/33
Whit[illegible]	38/38	42/34	58/22	31/45	35/41
Religion					
Catholic	36/39	40/36	56/22	27/48	31/44
Jewish	45/29	43/31	60/16	27/45	39/33
Protestant	42/35	46/28	59/22	38/38	38/37
Other, no religion	38/40	42/40	60/23	34/46	39/37
Stage in Life Cycle					
Young, no children	43/33	44/33	61/20	34/38	36/38
Children present, oldest <6	41/34	40/37	63/18	29/46	27/43
Children present, oldest 6-17	38/37	40/31	56/21	29/46	35/40
Older adults, no children	33/46	43/39	52/27	30/46	36/40
Elderly (60+) adults, no children	39/37	45/35	63/21	37/47	37/45
Service Usage					
Use this service	38/37	45/26	67/17	39/39	41/36
Do not use this service	39/38	41/36	57/22	29/16	33/42
Education					
Less than high school	42/39	39/37	58/26	29/47	34/46
High School degree	36/41	36/39	58/21	27/49	32/44
Some college	36/45	46/34	58/21	32/44	36/37
College degree	42/35	46/27	57/21	35/40	36/37
Graduate school	42/32	48/31	59/23	38/37	38/37

Table VIII (continued)

BELIEFS THAT SPENDING CAN BE CUT WITHOUT AFFECTING THE QUALITY OR QUANTITY OF VARIOUS EDUCATION SERVICES: (continued)

By Demographic Characteristics

	Public Elementary and Secondary Education <5%/≥15%	After School Programs <5%/≥15%	Special Education <5%/≥15%	Adult Education <5%/≥15%	Public Colleges <5%/≥15%
Household Income					
Less than $10,000	46/35%	43/39%	61/24%	37/43%	41/43%
$10,000 to <$20,000	37/38	41/34	60/19	30/46	33/42
$20,000 to <$30,000	37/39	42/35	57/23	28/46	33/42
$30,000 to <$50,000	39/38	44/31	57/22	34/43	37/38
$50,000 or more	32/43	34/40	41/32	30/46	28/43
Occupation of Household Head					
Professional	38%/35%	46%/32%	56%/23%	31%/42%	34%/37%
Managerial	34/38	44/31	57/22	34/42	34/40
Clerical, sales	41/36	41/32	57/22	34/42	38/35
Blue collar	40/38	39/38	63/19	30/46	36/44
Service	41/39	35/40	52/24	26/53	32/48
Not reported	37/40	43/36	57/24	31/49	34/44
Government Employee					
Educational employee	48/31	51/28	56/27	33/45	40/35
Local government employee	35/45	45/34	59/24	33/46	33/39
State government employee	46/39	57/18	67/19	37/44	51/44
Federal government employee	45/36	38/37	66/19	29/48	38/42
No local, state, or federal employees in household	37/37	41/35	57/22	31/44	34/41
Local Tax Price					
Owners: Less than 75% of community avg.	40/31	40/29	60/16	26/47	36/37
Owners: 75% to <100% of community avg.	34/39	39/32	56/23	31/45	29/41
Owners: 100% to <125% of community avg.	33/42	43/34	51/25	30/42	31/45
Owners: 125% or more of community avg.	30/43	41/35	48/25	30/44	31/39
Owners: Taxes not reported	35/35	36/35	58/17	32/42	39/34

Table VIII (continued)

BELIEFS THAT SPENDING CAN BE CUT WITHOUT AFFECTING THE QUALITY OR QUANTITY OF VARIOUS EDUCATION SERVICES: (continued)

By Demographic Characteristics

	Public Elementary and Secondary Education <5%/≥15%	After School Programs <5%/≥15%	Special Education <5%/≥15%	Adult Education <5%/≥15%	Public Colleges <5%/≥15%
Local Tax Price (continued)					
Renters: never owned, no plans to own	47%/31%	43%/30%	57%/21%	33%/41%	36%/37%
Renters: Ever owned	39/35	41/34	60/21	27/43	34/39
Renters: Plan to own	37/43	38/45	58/22	31/43	32/41
Neither rent nor own	49/28	51/28	67/14	53/33	42/28
Political Ideology					
Very conservative	35/44	35/47	49/30	29/48	27/50
Fairly conservative	34/43	38/40	53/27	31/48	33/44
Middle of the road	37/37	42/31	58/21	29/44	34/38
Fairly liberal	43/31	48/28	64/16	35/39	37/39
Very liberal	51/25	51/29	69/13	36/43	47/29

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[a] Based on the questions: "By what percentage, if any, do you think government could cut back spending on ____ without significantly affecting the quality or amount of service provided?" And by what percentage, if any, do you think state government could cut taxes and spending without significantly cutting the amount of services? Overall, by what percentage, if any, do you think your local government could cut taxes and spending without significantly cutting the amount of services?"

[b] Each entry has two numbers. The number to the left of the slash is the percentage of respondents who believe that spending cuts of 5% or more would significantly affect the quality or amount of service provided. The number to the right of the slash is the percentage of respondents who believe spending for that service could be cut by 15% or more without significantly affecting the quality or amount of service provided. Percentages are based on those responding to the question. NA means that the question was not asked.

[c] "State government employee" includes county employees.

could be cut by 15 percent or more without reducing service levels. Hence, the larger this second number, the greater the proportion of respondents who perceive extensive inefficiency and waste.[1]

Previous analysis has shown that respondents perceived less inefficiency and waste in the provision of education services than in the provision of overall local or overall state services.[2] Despite this, at least one in three respondents thought spending on four of the five education services could be reduced by 15 percent or more without affecting services. In the case of special education, only one in five (22 percent) held this view, while six in ten (58 percent) believed spending cuts of five percent or more would reduce service levels.

The clearest pattern emerges with respect to political ideology. Those who are conservative are consistently more likely than those who are liberal to perceive inefficiency and waste, and in many cases the differences are large. Forty-four percent of those who say they are "very" conservative, in contrast to 25 percent of those who say they are "very" liberal, thought spending on elementary and secondary education could be cut by 15 percent or more without service reductions.

Not surprisingly, respondents in households with a worker in the local public school are the least likely to perceive inefficiency in school operations. These respondents are more likely than other groups, however, to perceive inefficiency in the provision of special education. This provides additional evidence of the conflict between regular and special education. A similar conflict appears between school and non-school local government operations; respondents in households with a municipal employee are much more likely than all other groups to believe that local public schools are inefficiently run.

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[1] This measure of perceived inefficiency is flawed to the extent that respondents who wanted to shift to private provision or more user charge financing of a publicly provided service reported that they believed spending could be cut without service cuts. This limitation should be kept in mind when interpreting the results for adult education and public colleges.

[2] See Ladd and Wilson, "Proposition 2 1/2: Explaining the Vote."

Patterns across the other demographic categories are suggestive though not always consistent across service types. To summarize, more than two out of five respondents in each of the following groups believes that spending in elementary and secondary schools can be cut back by 15 percent or more without service reductions:

- non-elderly older households with no children;
- respondents with some college education;
- households with a non-school local government employee;
- households with income greater than $50,000; and
- respondents who consider themselves "fairly" or "very" conservative.

These are therefore the groups most commonly disenchanted with the operation of local public schools.

Education Finance

As noted in Section I, elementary and secondary education is financed heavily by local property taxes in Massachusetts while state and community colleges are financed primarily by state taxes and tuitions. In this section we examine how respondents would like to alter these financing arrangements. The findings are based on responses to a question about whether respondents wanted to continue the current financing arrangement for each education service or whether they wanted to see a greater share of the money come from local property taxes, state income taxes, state sales taxes, user fees or some other source.[1]

Table IX shows that preferences for changes in financing arrangements differ across the five education services. More than three-quarters of the respondents wanted to change the way public elementary and secondary education is financed in the state, but

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[1] Respondents were not told what proportion of any of the services was currently financed with property taxes.

Table IX

PREFERENCES FOR SHIFTING MORE OF THE FINANCING OF VARIOUS EDUCATIONAL SERVICES TO LOCAL OR STATE TAXES OR USER FEES[a,b,c]

By Demographic Characteristics

	Public Elementary & Secondary Educ. Shift more to:			After School Programs Shift more to:			Special Education Shift more to:			Adult Education Shift more to:			Public Colleges Shift more to:		
	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees
Total	34%	36%	7%	39%	19%	20%	15%	60%	6%	20%	27%	32%	3%	58%	21%
Sex															
Female	32	38	7	39	18	23	15	60	6	21	25	31	5	58	19
Male	36	36	7	39	21	18	15	62	6	20	27	33	2	58	22
Race															
Non-white	26	41	3	29	30	15	18	51	8	18	31	16	5	61	16
White	36	37	7	40	19	21	15	61	6	20	26	33	3	58	21
Religion															
Catholic	36	36	7	42	21	19	15	62	5	23	26	31	4	59	20
Jewish	33	39	5	34	18	20	16	62	3	19	23	42	4	61	18
Protestant	32	37	7	40	16	21	17	55	7	20	26	31	4	56	20
Other, no religion	31	40	9	32	21	24	11	66	7	14	28	36	1	57	24
Stage in Life Cycle															
Young, no children	34	46	5	35	24	20	11	69	6	20	26	39	4	60	19
Children present, oldest <6	35	36	8	39	22	23	24	55	4	18	29	30	3	54	29
Children present, oldest 6-17	36	34	7	42	16	21	15	60	6	22	23	35	3	57	22
Older adults, no children	31	38	11	36	21	21	13	62	7	18	29	30	2	61	19
Elderly (60+) adults, no children	34	29	6	42	16	18	17	55	6	23	28	21	4	58	16

Table IX (continued)

PREFERENCES FOR SHIFTING MORE OF THE FINANCING OF VARIOUS EDUCATIONAL SERVICES TO LOCAL OR STATE TAXES OR USER FEES[a,b,c]

By Demographic Characteristics

	Public Elementary & Secondary Educ.			After School Programs			Special Education			Adult Education			Public Colleges		
	Shift more to:			Shift more to:			Shift more to:			Shift more to:			Shift more to:		
	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees
Service Usage															
Use this service	37%	35%	6%	43%	19%	6%	18%	63%	2%	20%	27%	30%	2%	66%	18%
Do not use this service	33	38	8	38	20	6	15	60	6	21	26	33	4	56	22
Education															
Less than high school	29	50	3	26	33	16	15	61	5	21	35	22	5	57	17
High School degree	33	36	8	41	20	20	19	57	5	20	29	31	4	56	22
Some college	37	34	7	43	15	20	14	61	7	19	23	36	2	58	23
College degree	38	36	8	44	15	23	14	62	6	23	21	37	4	61	20
Graduate school	34	35	8	32	17	22	18	64	7	17	24	33	2	60	18
Occupation of Household Head															
Professional	32	36	7	37	19	22	12	61	7	19	23	34	3	62	18
Managerial	37	34	10	42	15	26	19	57	8	23	19	41	2	58	24
Clerical, sales	30	37	7	36	21	22	12	59	6	17	28	32	3	58	21
Blue collar	38	37	6	41	22	17	18	63	3	20	31	28	4	57	21
Service	21	47	9	44	19	18	14	59	9	25	30	28	8	55	15
Not reported	36	36	6	37	23	16	12	62	6	19	29	27	3	54	22
Government Employee															
Educational employee	26	41	9	36	23	20	12	56	7	25	22	31	2	64	14
Local government employee	37	37	7	46	16	17	20	56	4	26	19	33	3	55	22
State government employee[d]	23	46	7	33	21	23	5	72	4	20	36	42	5	59	20
Federal government employee	28	44	12	29	22	27	15	57	12	17	23	35	2	61	25
No local, state, or federal employees in household	35	36	7	40	19	20	16	61	6	20	27	32	4	58	21

Table IX (continued)

PREFERENCES FOR SHIFTING MORE OF THE FINANCING OF VARIOUS EDUCATIONAL SERVICES TO LOCAL OR STATE TAXES OR USER FEES[a,b,c]
By Demographic Characteristics

	Public Elementary & Secondary Educ.			After School Programs			Special Education			Adult Education			Public Colleges		
	Shift more to:			Shift more to:			Shift more to:			Shift more to:			Shift more to:		
	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees
Household Income															
Less than $10,000	33%	40%	4%	32%	30%	18%	14%	60%	7%	22%	30%	29%	5%	58%	18%
$10,000 to <$20,000	31	39	6	38	21	17	15	60	5	18	30	29	4	58	18
$20,000 to <$30,000	33	38	8	42	17	20	13	65	5	19	24	33	3	55	23
$30,000 to <$50,000	41	31	10	41	15	26	18	57	7	23	22	37	3	61	23
$50,000 or more	34	35	7	40	16	28	17	52	12	19	21	39	2	62	26
Local Tax Share															
Owners: Less than 75% of community avg.	31	39	4	39	15	19	15	57	5	16	26	32	3	54	18
Owners: 75% to <100% of community avg.	39	28	8	45	13	21	15	61	4	20	21	36	3	56	22
Owners: 100% to <125% of community avg.	37	36	8	37	15	24	17	57	3	25	24	26	2	60	21
Owners: 125% or more of community avg.	27	35	9	41	11	24	15	52	9	23	22	33	2	54	26
Owners: Taxes not reported	37	35	4	34	22	21	18	63	3	19	30	29	2	58	18

Table IX (continued)

PREFERENCES FOR SHIFTING MORE OF THE FINANCING OF VARIOUS EDUCTIONAL SERVICES TO LOCAL OR STATE TAXES OR USER FEES[a,b,c]

By Demographic Characteristics

	Public Elementary & Secondary Educ.			After School Programs			Special Education			Adult Education			Public Colleges		
	Shift more to:			Shift more to:			Shift more to:			Shift more to:			Shift more to:		
	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees	Local Taxes	State Taxes	User Fees
Local Tax Share (continued)															
Renters: never owned, no plans to own	30%	45%	6%	32%	30%	18%	15%	61%	7%	17%	31%	30%	6%	56%	15%
Renters: Ever owned	35	38	7	39	25	15	12	67	5	21	25	36	3	67	17
Renters: Plan to own	32	24	11	37	32	20	13	50	9	15	30	28	6	43	23
Neither rent nor own	44	40	5	42	21	16	9	65	7	26	25	33	2	63	23
Political Ideology															
Very conservative	33	35	6	35	18	24	11	63	9	17	26	34	3	55	27
Fairly conservative	34	38	9	37	23	20	14	59	6	22	28	31	3	60	20
Middle of the road	36	36	6	43	18	20	16	60	6	21	25	32	3	57	21
Fairly liberal	35	36	8	40	16	21	15	63	4	20	22	38	4	55	22
Very liberal	25	49	8	31	26	16	18	63	5	15	37	24	3	65	12

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[a] Based on the question: "For each service I read, would you like to keep the financing the way it now is or to see a greater share of the money come from local property taxes, from state income taxes, from state sales taxes, or a greater share from fees paid by users of the service?"

[b] Percentages are calculated for respondents who answered each question.

[c] State taxes include income taxes and sales taxes.

[d] "State government employee" includes county employees.

surprisingly, only a third (36 percent) wanted to increase the share financed by state taxes while another third wanted to increase reliance on the local property tax. Strongest support for increased state financing came from those with less than high school education, heads of young households with no children, non-whites, low income households, renters who have never owned and have no immediate plans to own, and those who describe themselves as very liberal. Surprisingly, homeowners on average were less likely than renters to prefer more reliance on state taxes. Strongest support for increasing the property tax share of public school finance came from Catholics, whites, and both managerial and blue-collar households.

With respect to the financing of after school programs, four in ten respondents wanted to rely more heavily on local property taxes, two in ten wanted to shift some of the burden to state taxes, and another two in ten want to increase reliance on user fees. Respondents with less than a high school degree, non-whites, and renters--especially those who have never owned and have no immediate plans to own--are more likely than others to prefer a higher state share. Whites, women, respondents in pink- and white-collar households, in households with above average local tax shares and incomes above $30,000, and those who describe themselves as very conservative are more likely than others to prefer a shift to user fees.

Six in ten respondents want to increase the state share of special education financing. Support for state financing of special education is similarly high across all groups, although it increases as the respondents' education increases, and is greater among whites than non-whites and among respondents in young households with no children than in other household types.

Three in ten respondents wanted to increase the users' share of financing for adult education. The strength of this preference increases with the respondents' education and household income. It is weakest among the elderly, non-whites, managerial households, and those who describe themselves as very liberal. One in four respondents wanted to increase the state share of financing for adult education. Interest in this type of change exhibits the opposite pattern across income and education groups than that for user charges; the less educated and the poor are more likely than others to want a larger state share. Support for this change is weakest among whites and professional and managerial households.

Nearly six in ten respondents wanted to increase the state share of financing for public higher education while two in ten wanted to increase tuitions and fees. Support for increasing the state share came equally from all groups. Support for increasing tuitions and fees was greatest among young household heads with pre-school children, high income households, and those who describe themselves as very conservative.

IV. CONCLUSION

Respondents' views on education-related issues help to explain the voting outcomes on Proposition 2 1/2, which requires dramatic reductions in property taxes, and on Question 3, which would have required increased state aid for education. The passage of the former and the defeat of the latter should not be interpreted as evidence that Massachusetts voters were rebelling against education services and spending. Instead, household heads appear to have been more concerned with the process by which education spending is determined. As shown in Section II, education views contributed on net about 7 percentage points to the statewide favorable vote on Proposition 2 1/2. Perceptions of inefficiency and expectations that the measure would lead to greater control by voters over school spending contributed much more to the favorable vote than preferences for lower service or spending levels.

Section III showed that the typical Massachusetts household head was relatively satisfied with the level of public education services and the way they were provided at the time of the tax limitation vote.

At the same time, however, there was more disenchantment with some aspects of local public schools than others and certain categories of residents were less satisfied than others. Recognition of these differences is important for public officials in Massachusetts responding to Proposition 2 1/2 and for policy makers in other states grappling with the problem of allocating scarce resources between education and other public services, and among categories of education spending.

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APPENDIX A

PROPOSITION 2 1/2 AND QUESTION 3 VOTING MODELS

Table A-I

PROPOSITION 2 1/2 VOTING MODEL[a]

Estimated Coefficients and t Values

Variable	Form[b]	Coefficient	t Statistic
Intercept		0.007	0.06
Preferences For Service Levels[c]			
Education & Recreation[d]	Linear (1-5)	-0.040	-2.01
Public Safety[e]	Linear (1-5)	-0.027	-1.57
Sanitation & Street Repair[f]	Linear (1-5)	-0.004	-0.22
Human Services[g]	Linear (1-5)	0.024	1.39
Welfare[h]	Linear (1-5)	-0.023	-2.10
Expected Service Levels[i]			
Education & Recreation[d]	Ln (1-5)	0.151	3.02
Public Safety[e]	Ln (1-5)	0.124	2.98
Sanitation & Street Repair[f]	Ln (1-5)	0.041	1.01
Human Services[g]	Ln (1-5)	0.119	2.64
Welfare[h]	Linear (1-5)	-0.043	-3.12
Total community services	Ln (1-5)	0.124	3.81
Services used by household	Ln (1-5)	0.031	0.82
Perception of Inefficiency in:[j]			
Local government	0-1	-0.002	-0.05
State government	0-1	0.039	1.03
Local schools	0-1	0.050	2.01
Welfare spending	0-1	0.018	0.58
Attitudes about Inefficiency			
Local government employees are overpaid and do not work hard[k]	linear (1-4)	0.057	4.23
Expected Efficiency Gains[i]			
More efficiency in local government	0-1	0.129	4.89
More efficient, responsible or less corrupt government[l]	0-1	0.096	0.021
More local voter control over school spending	0-1	0.129	0.090

Table A-I (continued)

PROPOSITION 2 1/2 VOTING MODEL[a]

Estimated Coefficients and t Values

Variable	Form[b]	Coefficient	t Statistic
Preferences for Lower Spending and Taxes[m]			
State government	0-1	0.028	1.13
Local government	0-1	0.021	0.83
Local schools	0-1	0.049	1.96
Expected Changes in Spending and Taxes[i]			
Decrease in school funds	0-1	-0.060	-2.55
Lower property taxes	0-1	0.131	4.50
Higher state taxes	0-1	-0.079	-2.93
Lower household taxes	Ln (1-5)	-0.112	-4.14
Preferences for Shifting Method of Finance			
Shift of education to state taxes[n]	0-1	0.047	1.93
Shift of special education to state taxes[o]	0-1	0.009	0.39
Shift of other local services to state taxes[p]	Linear (0-1)	-0.019	-0.46
Shift of certain services to user charges[q]	Linear (0-1)	0.053	1.53
Attitudes Toward Taxes			
State should give more aid to reduce property taxes	0-1	-0.013	-0.51
Support for redistributive taxes and aid[r]	Linear (1-4)	-0.025	-1.83
Expected Changes in Taxes[i]			
Tax reform	0-1	0.057	1.96
More state aid	0-1	0.024	1.10

Table A-1 (continued)

PROPOSITION 2 1/2 VOTING MODEL[a]

Estimated Coefficients and t Values

Variable	Form[b]	Coefficient	t Statistic
Perception of Fiscal Position of Other Groups Relative to that of Respondent's Households			
Business firms are better off today	0-1	-0.030	1.34
Business firms have done better over the past two years	0-1	0.041	1.77
Poor households are better off today	0-1	0.015	0.56
Poor households have done better over the past two years	0-1	0.071	2.18
Minority households are better off today	0-1	0.035	1.27
Minority households have done better over the past two years	0-1	-0.055	-1.88
Household Member Employed By Public Sector			
Local schools	0-1	-0.076	-1.30
Local government	0-1	-0.121	-3.06
State government	0-1	-0.072	-1.69

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[a] Based on 1,114 respondents for whom complete information was available. Estimated using ordinary least squares. The dependent variable takes on the value of 1 for a "yes" vote. The R^2 is .54. The equation correctly predicts the vote of 85% of the respondents.

[b] Variables enter the equation in three forms--linear, log, and dummy. Linear and log variables are scaled from one to five or one to four. Responses ranging from one to five are based on the following scale: "A lot less" = 1, "a little less" = 2, "the same" = 3, "a little more" = 4, "a lot more" = 5. Responses ranging from one to four are based on the following scale: "disagree a lot" = 1, "disagree a little" = 2, "agree a little" = 3, "agree a lot" = 4. Unless otherwise indicated, dummy variables are scored in the following manner: 1 = "agree a lot" or "agree a little" with the statement. All other responses = 0.

Table A-I (continued)

[c] Items in each group were clustered using factor analytic techniques. For a more detailed discussion of this see Helen F. Ladd and Julie Boatright Wilson, "Why Voters support Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2."

[d] Includes "public elementary and high school education," "adult education," "local public parks and recreation facilities," and "after school programs for students, such as music and athletics."

[e] Includes "fire fighting services" and "police services".

[f] Includes "regular garbage pick-up" and "street and sidewalk repairs."

[g] Includes "special education for children with learning problems," "mental health programs," and "services for the elderly."

[h] "Welfare or other public assistance programs."

[i] All expectation variables are respondent's belief that certain outcomes will occur as a result of Proposition 2 1/2.

[j] Belief that spending in these areas could be reduced by 15 percent or more without significantly reducing the quality or quantity of services.

[k] Cluster of two attitude items: "City or town employees are overpaid" and "City or town employees don't work as hard as people who work for private companies." Respondents' scores on these two items are added and divided by two. Scores range from one to four.

[l] Open-ended response to: "Overall, what do you think will be the single most important change caused by the passage of Proposition 2 1/2?"

[m] Prefer to reduce spending and taxes by five percent or more.

[n] Scored 1 if respondent wants more state (sales or income tax) financing of elementary and secondary education, and 0 otherwise.

[o] Scored 1 if respondent wants more state (sales or income tax) financing of special education, and 0 otherwise.

[p] Sum of responses indicating a desired shift to state income or sales taxes for police, parks, or after-school programs, divided by the number of these services for which an answer was given. (Range is 0 to 1.)

[q] Sum of responses indicating a desired shift to user charges for local transportation, adult education, and after school programs, divided by the number of these services for which an answer was given. (Range is 0 to 1.)

[r] Cluster of two attitude items: "A graduated income tax is the best way for the state to raise money," and "Taxpayers in rich cities and towns should help pay for services in poorer cities and towns." Respondents' scores on these two items are summed and divided by two. Scores range from one to four.

Table A-I (continued)

[s] Based on two questions: "Sometimes it seems that certain groups of people pay a lot in taxes but don't get very many services while others don't pay much in taxes but get a lot of services. Using the phrases in list one, please tell me whether ____ get a lot less than they pay for, a little less, the same amount as they pay for, a little more, or a lot more than they pay for"; and "Now we'd like you to think about two years ago. Taking into account services they get for the taxes they pay are ____ better off, worse off or about the same now as they were two years ago?". Respondents' scores for their own household are compared to their scores for business and industry, poor families and minority groups. A score of 1 is given if the repsondent believes members of the other group pay less for services than his or her household does or are better off now than his or her household compared to two years ago.

Table A-II

QUESTION 3 VOTING MODEL[a]

Estimated Coefficients and t Values

Variable	Form[b]	Coefficient	t Statistic
Intercept		-0.151	-0.60
Preferences For Service Levels[c]			
Education & Recreation[d]	Linear (1-5)	0.061	1.34
Public Safety[e]	Linear (1-5)	0.009	0.18
Sanitation & Street Repair[f]	Linear (1-5)	-0.055	-1.32
Human Services[g]	Linear (1-5)	0.041	1.00
Welfare[h]	Linear (1-5)	0.027	0.96
Perception of Inefficiency in:[i]			
Local government	0-1	0.007	0.09
State government	0-1	-0.046	-0.50
Local schools	0-1	-0.032	-0.50
Welfare spending	0-1	0.045	0.56
Attitudes about Inefficiency			
Local government employees are overpaid and do not work hard[j]	Linear (1-4)	-0.039	-1.14
Preferences for Lower Spending and Taxes[k]			
State government	0-1	0.013	0.23
Local government	0-1	0.028	0.47
Local schools	0-1	-0.085	-1.36
Expected Changes in Spending and Taxes[l]			
More money for local schools	0-1	0.200	3.75
Slower growth of property taxes	0-1	0.169	2.88
Slower growth of all taxes and spending	0-1	0.143	2.52
Preferences for Shifting Method of Finance			
Shift of education to state taxes[m]	0-1	0.040	0.69
Shift of special education to state taxes[n]	0-1	-0.042	-0.80
Shift of other local services to state taxes[o]	Linear (0-1)	0.184	1.65
Shift of certain services to user charges[p]	Linear (0-1)	0.075	0.92

Table A-II (continued)

QUESTION 3 VOTING MODEL[a]

Estimated Coefficients and t Values

Variable	Form[b]	Coefficient	t Statistic
Attitudes Toward Taxes			
State should give more aid to reduce property taxes	0-1	-0.015	-0.24
Support for redistributive taxes and aid[q]	0-1	-0.006	-0.17
Expected Changes in Taxes[l]			
State tax reform	0-1	0.125	2.16
Perception of Fiscal Position of Other Groups Relative to that of Respondent's Household[r]			
Business firms are better off today	0-1	0.079	1.45
Business firms have done better over the past two years	0-1	0.047	0.85
Poor households are better off today	0-1	0.029	0.44
Poor households have done better over the past two years	0-1	0.089	1.17
Minority households are better off today	0-1	-0.009	-0.14
Minority households have done better over the past two years	0-1	-0.015	-0.22
Household Member Employed By Public Sector			
Local schools	0-1	0.133	1.34
Local government	0-1	0.167	1.84
State government	0-1	0.090	0.67

Table A-II (continued)

QUESTION 3 VOTING MODEL[a]

Estimated Coefficients and t Values

[a] Based on 315 respondents for whom complete information was available. Estimated using ordinary least squares. The dependent variable takes on the value of 1 for a "yes" vote. The R^2 is .21.

[b] Variables enter the equation in three forms--linear, log, and dummy. Linear and log variables are scaled from one to five or one to four. Responses ranging from one to five are based on the following scale: "A lot less" = 1, "a little less" = 2, "the same" = 3, "a little more" = 4, "a lot more" = 5. Responses ranging from one to four are based on the following scale: "disagree a lot" = 1, "disagree a little" = 2, "agree a little" = 3, "agree a lot" = 4. Unless otherwise indicated, dummy variables are scored in the following manner: 1 = "agree a lot" or "agree a little" with the statement. All other responses = 0.

[c] Items in each group were clustered using factor analytic techniques. For a more detailed discussion of this see Helen F. Ladd and Julie Boatright Wilson, "Why Voters Support Tax Limitations: Evidence from Massachusetts' Proposition 2 1/2."

[d] Includes "public elementary and high school education," "adult education," "local public parks and recreation facilities," and "after school programs for students, such as music and athletics."

[e] Includes "fire fighting services" and "police services".

[f] Includes "regular garbage pick-up" and "street and sidewalk repairs."

[g] Includes "special education for children with learning problems," "mental health programs," and "services for the elderly."

[h] "Welfare or other public assistance programs."

[i] Belief that spending in these areas could be reduced by 15 percent or more without significantly reducing the quality or quantity of services.

[j] Cluster of two attitude items: "City or town employees are overpaid" and "City or town employees don't work as hard as people who work for private companies." Respondents' scores on these two items are added and divided by two. Scores range from one to four.

[k] Prefer to reduce spending and taxes by five percent or more.

[l] All expectation variables are respondent's belief that certain outcomes would have occurred if Question 3 had passed.

[m] Scored 1 if respondent wants more state (sales or income tax) financing of elementary and secondary education, and 0 otherwise.

Table A-II (continued)

[n] Scored 1 if respondent wants more state (sales or income tax) financing of special education, and 0 otherwise.

[o] Sum of responses indicating a desired shift to state income or sales taxes for police, parks, or after-school programs, divided by the number of these services for which an answer was given. (Range is 0 to 1.)

[p] Sum of responses indicating a desired shift to user charges for local transportation, adult education, and after school programs, divided by the number of these services for which an answer was given. (Range is 0 to 1.)

[q] Cluster of two attitude items: "A graduated income tax is the best way for the state to raise money," and "Taxpayers in rich cities and towns should help pay for services in poorer cities and towns." Respondents' scores on these two items are summed and divided by two. Scores range from one to four.

[r] Based on two questions: "Sometimes it seems that certain groups of people pay a lot in taxes but don't get very many services while others don't pay much in taxes but get a lot of services. Using the phrases in list one, please tell me whether ____ get a lot less than they pay for, a little less, the same amount as they pay for, a little more, or a lot more than they pay for"; and "Now we'd like you to think about two years ago. Taking into account services they get for the taxes they pay are ____ better off, worse off or about the same now as they were two years ago?". Respondents' scores for their own household are compared to their scores for business and industry, poor families and minority groups. A score of 1 is given if the repsondent believes members of the other group pay less for services than his or her household does or are better off now than his or her household compared to two years ago.

APPENDIX B

VIEWS ON FISCAL ISSUES:
SUPPORTERS OF PROPOSITION 2 1/2 AND QUESTION 3

Table B-I

AMOUNT OF VARIOUS PUBLIC SERVICES PREFERRED[a,b,c]

By Support for Proposition 2 1/2 and Question 3

Service Type	Total Respondents			Voted for Proposition 2 1/2			Voted for Question 3		
	Cut Back Services	Keep Services the Same	Increase Services	Cut Back Services	Keep Services the Same	Increase Services	Cut Back Services	Keep Services the Same	Increase Services
Municipal Services									
Police	10.9%	55.1%	34.1%	15.7%	60.4%	25.0%	6.0%	56.3%	37.7%
Fire fighting	9.0	71.1	19.9	13.0	75.9	11.2	5.8	68.5	25.7
Street & Sidewalk Repairs	10.0	50.1	39.9	13.9	52.8	33.4	7.8	50.9	41.3
Regular garbage pickup	12.9	73.1	14.0	18.6	72.4	9.0	9.7	76.4	14.0
Local public parks and recreation	13.8	53.1	33.1	18.9	55.4	25.7	10.1	52.6	37.4
Support of local public transportation	21.7	28.9	49.3	29.2	28.2	42.5	21.9	25.9	52.2
Local School-Related Services									
Public elementary & High School education	17.1	44.3	38.6	23.4	49.6	26.9	10.7	46.0	43.3
After-school programs	22.8	46.2	31.0	31.3	47.4	21.3	16.6	48.7	34.8
Special education	11.1	34.0	54.9	15.7	38.4	45.9	9.0	31.9	59.2
Adult education	18.0	54.4	27.5	23.3	53.3	23.5	13.0	56.5	30.5
Human Resources Services									
Mental health programs	9.5	40.4	50.1	12.3	44.3	43.3	8.4	35.9	55.7
Services for the elderly	6.0	39.5	54.6	8.2	43.8	48.1	5.1	36.0	58.4
State & community colleges and universities	17.7	54.1	28.2	24.5	55.1	20.4	10.8	53.4	35.8

Table B-I (continued)

AMOUNT OF VARIOUS PUBLIC SERVICES PREFERRED[a,b,c]

By Support for Proposition 2 1/2 and Question 3

Service Type	Total Respondents			Voted for Proposition 2 1/2			Voted for Question 3		
	Cut Back Services	Keep Services the Same	Increase Services	Cut Back Services	Keep Services the Same	Increase Services	Cut Back Services	Keep Services the Same	Increase Services
Legal Services									
Courts and judges	20.7%	46.4%	32.8%	26.5%	44.1%	29.4%	20.1%	42.4%	37.5%
Public Assistance									
Welfare or other public assistance	54.6	28.7	16.7	67.9	23.0	9.0	50.4	30.0	19.6
Local Services	19.7	43.9	36.5	30.5	44.8	24.7	13.7	44.8	41.5
State Services	38.7	25.9	35.4	53.7	23.1	23.2	31.7	27.2	41.1

[a] Based on the question: "Think about the services provided by the state or local government to residents of your town or city. For each service I read, please tell me whether state or local government should be providing a lot less, a little less, the same amount, a little more or a lot more of this service. Remember, if government provides less services state or local taxes will be reduced, and if government provides more services, state or local taxes will be increased. If the service is not available to residents in your city or town, please let me know. Let's begin with _____. Which phrase in the first list describes how much more or less _____ state or local government should provide?"

[b] Of the 1,586 respondents interviewed, 722 report voting "yes" on Proposition 2 1/2 and 431 report voting "yes" on Question 3. Percentages are based on eligible respondents answering each question and total 100% across a row for supporters of each group. Differences between the two groups of supporters of at least 7% are significant at the .05 level.

[c] "Cut back services" includes "cut back a lot" and "cut back a little". "Increase services" includes "increase a lot" and "increase a little".

Table B-II

DESIRED CHANGES IN TAXING AND SPENDING[a,b]

By Vote on Proposition 2 1/2 and Question 3

	Total Respondents	Voted Yes on Proposition 2 1/2	Voted Yes on Question 3	Difference: Voted Yes on Proposition 2 1/2 Minus Voted Yes on Question 3
State government spending and taxing should be:				
Increased	15.9%	10.6%	18.8%	-8.2%
Kept the same	20.5	14.2	21.0	-6.8
Decreased	62.8	75.1	60.2	+14.9
Local government spending and taxing should be:				
Increased	12.4	7.6	11.7	-4.1
Kept the same	27.9	21.8	33.3	-11.5
Decreased	58.6	70.6	55.0	+15.6
Local public school spending and taxing should be:				
Increased	20.0	17.8	21.0	-3.2
Kept the same	35.6	24.3	41.0	-6.7
Decreased	44.4	57.9	38.0	+19.1

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[a] Based on the questions: "Compared to what the state government now spends, by what percentage, if any, would you like to see state government taxing and spending increase or decrease. You may answer any percent increase or decrease from 1% to 100% or tell me you want it to stay the same. And by what percentage, if any, would you like to see local government taxing and spending increase or decrease? And by what percentage, if any, would you like to see local public school taxes and spending increase or decrease?"

[b] Of the 1,586 respondents interviewed, 722 report voting "yes" on Proposition 2 1/2 and 431 report voting "yes" on Question 3. Percentages are based on eligible respondents answering each question. Differences between the two groups of supporters of at least 7% are significant at the .05 level.

Table B-III

BELIEFS THAT SPENDING CAN BE CUT WITHOUT AFFECTING THE QUALITY OR QUANTITY OF SERVICES: POSSIBLE CUTBACKS OF LESS THAN 5 PERCENT/ POSSIBLE CUTBACKS OF 15 PERCENT OR MORE[a,b,c]

Among Supporters of Proposition 2 1/2 and Question 3

	Total Respondents <5%/≥15%	Voted Yes on Proposition 2 1/2 <5%/≥15%	Voted Yes on Question 3 <5%/≥15%	Difference: Voted Yes on Proposition 2 1/2 Minus Voted Yes on Question 3 <5%/≥15%
Municipal Services				
Police	51%/27%	44%/33%	57%/20%	-13%/13%
Fire fighting	NA	NA	NA	--
Street & sidewalk repairs	45/36	40/41	46/34	-6/7
Regular garbage pickup	51/30	51/34	53/26	-2/8
Local public parks and recreation	NA	NA	NA	--
Support of local public transportation	NA	NA	NA	--
Local School-related Services				
Public elementary and high school education	38/37	27/48	44/33	-17/15
After-school programs	42/34	35/40	48/29	-13/11
Special education	58/22	51/26	61/19	-10/7
Adult education	31/45	27/50	35/41	-8/9
Human Resources Services				
Mental health programs	NA	NA	NA	--
Services for the elderly	NA	NA	NA	--
State and community colleges & universities	35/40	29/66	41/35	-12/31
Legal Services				
Courts and judges	NA	NA	NA	--
Public Assistance				
Welfare or other public assistance	18/67	11/75	17/65	-6/10
State Services	11/73	6/80	13/69	-7/11
Local Services	18/60	10/69	20/55	-10/14

(Footnotes on following page)

[a] Based on the questions: "Now let's talk about some specific services. People we've talked to believe that government could cut back spending on these services by eliminating waste, inefficiency and other problems. By what percentage, if any, do you think government could cut back spending on _____ without significantly affecting the quality or amount of services provided? And by what percentage, if any, do you think state government could cut taxes and spending without significantly cutting the amount of services? Overall, by what percentage, if any, do you think your local government could cut taxes and spending without significantly cutting the amount of services?"

[b] Each entry has two numbers. The number to the left of the slash is the percentage of respondents who believe that spending cuts of 5% or more would significantly affect the quality or amount of service provided. The number to the right of the slash is the percentage of respondents who believe spending for that service could be cut by 15% or more without significantly affecting the quality or amount of services provided. Percentages are based on those responding to the question. NA means that the question was not asked.

[c] Of the 1,586 respondents interviewed, 722 report voting "yes" on Proposition 2 1/2 and 431 report voting "yes" on Question 3. Percentages are based on eligible respondents answering each question. Differences between the two groups of at least 7% are significant at the .05 level.

Table B-IV

ATTITUDES TOWARD GOVERNMENT AND TAXES[a,b,c]

By Vote on Proposition 2 1/2 and Question 3

	Total Respondents	Voted Yes on Proposition 2 1/2	Voted Yes on Question 3	Difference: Voted Yes on Proposition 2 1/2 Minus Voted Yes on Question 3
The government should make sure that each family has enough to live on	65.5%	58.6%	65.1%	-6.5%
People expect too many services from government	68.4	77.7	69.5	+8.2
Government interferes too much in people's lives	76.5	83.0	76.8	+6.2
People now on welfare could find jobs if they really tried	78.8	84.8	77.4	+7.4
City or town employees are overpaid	47.1	55.5	39.5	+16.0
City or town employees don't work as hard as people who work for private companies	66.7	76.0	62.3	+13.7
Proposition 13 in California showed that taxes can be cut without cuts in services	63.8	82.4	56.2	+26.2
Corruption is common in my local government	63.4	63.3	63.7	-0.4
Corruption is common in my state government	87.8	89.4	88.9	+0.5

Table B-IV (continued)

ATTITUDES TOWARD GOVERNMENT AND TAXES[a,b,c]

By Vote on Proposition 2 1/2 and Question 3

	Total Respondents	Voted Yes on Proposition 2 1/2	Voted Yes on Question 3	Difference: Voted Yes on Proposition 2 1/2 Minus Voted Yes on Question 3
A graduated income tax is the best way for the state to raise money	61.9%	59.9%	65.4%	-5.5%
A sales tax is the best way for the state to raise money[c]	73.1	73.8	77.0	-3.2
The property tax is the best way for cities and towns to raise money for city services	58.2	55.5	59.6	-4.1
It's OK for property taxes to rise as fast as the cost of living	21.8	18.6	20.3	-1.7
State government should give more money to the cities and towns so local property taxes can be kept down	77.2	75.2	83.5	-8.3
Taxpayers in rich cities and towns should help pay for services in poorer cities and towns	41.8	34.6	42.9	-8.3
A cut in property taxes would benefit homeowners more than business and industry	59.6	66.3	55.7	+10.6
When property taxes go up, landlords just raise rents	89.4	89.5	88.7	+0.8
When business property taxes go up, businesses just raise their prices to consumers	88.0	88.6	88.1	+0.5

Table B-IV (continued)

ATTITUDES TOWARD GOVERNMENT AND TAXES[a,b,c]

By Vote on Proposition 2 1/2 and Question 3

	Total Respondents	Voted Yes on Proposition 2 1/2	Voted Yes on Question 3	Difference: Voted Yes on Proposition 2 1/2 Minus Voted Yes on Question 3
Political Ideology				
Very conservative	8.9%	10.0%	6.6%	+3.4%
Fairly conservative	26.4	30.1	28.2	+1.9
Middle of the road	38.6	42.1	38.1	+4.0
Fairly liberal	19.3	13.8	18.9	-5.1
Very liberal	6.8	3.9	8.2	-4.3

[a] Based on the questions: "Now I'd like to get your opinions on tax and other government issues. For each statement I read, tell me whether you agree a lot, agree a little, disagree a little or disagree a lot. How much do you agree or disagree that __________?" and "How would you describe yourself politically? Would you say you are very conservative, fairly conservative, middle of the road, fiarly liberal or very liberal?"

[b] Each entry (except those for political ideology) is the percentage of respondents who agree "a lot" or "a little" that the particular outcome will occur. Of the 1,586 respondents interviewed, 722 report voting "yes" on Proposition 2 1/2 and 431 report voting "yes" on Question 3. Percentages are based on eligible respondents answering each question. Differences between the two groups of supporters of at least 7% are significant at the .05 level.

[c] This question was asked of only a subsample of respondents.

Table B-V

PREFERRED METHOD FOR FINANCING VARIOUS PUBLIC SERVICES[a,b]

By Support for Proposition 2 1/2 and Question 3

	Total Respondents Greater Share of Money From			Voted Yes on Proposition 2 1/2 Greater Share of Money From			Voted Yes on Question 3 Greater Share of Money From			Difference: Voted for Proposition 2 1/2 minus Voted for Question 3 Greater Share of Money From		
	Property Taxes	State Taxes	User Fees	Property Taxes	State Taxes	User Fees	Property Taxes	State Taxes	User Fees	Property Taxes	State Taxes	User Fees
Municipal Services												
Police	51%	22%	2%	54%	20%	2%	54%	24%	2%	0%	-4%	0%
Fire Fighting[c]	51	16	1	57	12	1	53	22	0	+4	-10	+1
Street & Sidewalk Repair[c]	51	16	2	54	14	1	56	17	0	-2	-3	+1
Regular Garbage Pickup[c]	42	10	17	40	10	18	48	5	20	-8	+5	-2
Local Public Parks and Recreation	49	19	8	50	18	9	52	21	8	-2	-3	+1
Support of Local Public Transportation	18	36	26	16	33	30	19	38	26	-3	-5	+4
Local School-Related Services												
Public Elementary & High School Education	34	37	7	35	34	10	37	42	6	-2	-8	+4
After-school Programs	39	20	20	40	15	26	42	21	18	-2	-6	+8
Special Education	15	60	6	15	59	7	14	66	4	+1	-7	+3
Adult Education	20	26	32	21	23	34	23	27	30	-2	-4	+4

Table B-V (continued)

PREFERRED METHOD FOR FINANCING VARIOUS PUBLIC SERVICES[a,b]

By Support for Proposition 2 1/2 and Question 3

	Total Respondents Greater Share of Money From			Voted Yes on Proposition 2 1/2 Greater Share of Money From			Voted Yes on Question 3 Greater Share of Money From			Difference: Voted for Proposition 2 1/2 minus Voted for Question 3 Greater Share of Money From		
	Property Taxes	State Taxes	User Fees	Property Taxes	State Taxes	User Fees	Property Taxes	State Taxes	User Fees	Property Taxes	State Taxes	User Fees
Human Resources Services												
Mental Health Programs	5%	72%	5%	6%	71%	5%	4%	75%	5%	+2%	-4%	0%
Services for the Elderly[c]	16	56	3	14	59	3	22	55	3	-8	+4	0
State & Community Colleges & Universities	3	58	21	3	56	25	3	64	17	0	-8	+8
Legal Services												
Courts and Judges	9	54	10	6	58	3	9	59	1	-3	-1	+2
Public Assistance												
Welfare or other Public Assistance	8	59	8	7	63	7	7	62	7	0	+1	0

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[a] Based on the question: "For each service I read, would you like to keep the financing the way it now is or to see a greater share of the money come from local property taxes, from state income taxes, from state sales taxes, or a greater share from fees paid by users of the service?

[b] Of the 1,586 respondents interviewed, 722 report voting "yes" on Proposition 2 1/2 and 431 report voting "yes" on Question 3. Percentages are based on eleigible respondents answering each question, and total to 100% across a row for each group of respondents. Differences between the two groups of supporters of at least 7% are significant at the .05 level.

[c] Asked only of a subsample of respondents. Differences between each group of 10% or more are significant at the .05 level.

APPENDIX C

EXPECTED EFFECTS OF PROPOSITION 2 1/2

Table C-1

EXPECTATION THAT PROPOSITION 2 1/2 WILL LEAD TO CUTS IN VARIOUS EDUCATION SERVICES[a,b]

By Demographic Characteristics

	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Total	56.4%	71.4%	49.9%	65.9%	54.4%
Sex					
Female	57.3	69.5	51.9	64.0	52.1
Male	55.4	73.3	47.9	67.9	56.7
Race					
Non-white	60.2	63.7	59.1	60.4	52.8
White	56.1	71.8	49.4	66.3	54.5
Religion					
Catholic	54.6	70.8	47.5	64.8	54.3
Jewish	67.4	82.6	55.6	84.4	61.8
Protestant	52.6	68.1	49.2	60.1	52.3
Other, no religion	64.4	74.8	56.4	72.9	55.6
Stage in Life Cycle					
Young, no children	60.6	76.1	59.0	65.8	60.4
Children present, oldest <6	58.8	72.2	49.7	66.5	57.7
Children present, oldest 6-17	56.7	72.8	51.9	68.7	53.6
Older adults, no children	56.0	71.5	45.3	70.1	52.2
Elderly (60+) adults, no children	48.2	60.4	38.6	53.5	47.7
Service Usage					
Use this service	57.8	75.2	51.1	62.0	54.3
Do not use this service	55.7	70.6	49.8	67.0	42.4
Education					
Less than high school	51.7	69.4	50.0	61.8	49.0
High School degree	49.9	64.6	44.6	60.6	48.9
Some college	56.6	72.0	51.2	64.7	56.8
College degree	60.0	75.6	51.1	72.0	60.5
Graduate school	73.2	84.4	60.1	78.0	60.4

Table C-1 (continued)

EXPECTATION THAT PROPOSITION 2 1/2 WILL LEAD TO CUTS IN VARIOUS EDUCATION SERVICES[a,b]

By Demographic Characteristics

	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Household Income					
Less than $10,000	52.5%	62.6%	51.2%	56.1%	44.7%
$10,000 to <$20,000	55.1	68.9	49.7	62.6	53.5
$20,000 to <$30,000	59.3	73.2	51.3	67.0	56.6
$30,000 to <$50,000	55.6	75.1	47.4	72.6	56.6
$50,000 or more	58.8	81.2	50.7	73.9	56.5
Occupation of Household Head					
Professional	64.4	75.6	55.4	72.4	57.9
Managerial	53.2	73.9	45.8	67.0	51.4
Clerical, sales	54.3	64.6	42.8	59.0	48.4
Blue collar	53.3	73.5	50.6	65.5	56.8
Service	53.4	61.0	49.5	58.1	48.1
Not reported	55.1	65.8	50.9	62.7	56.3
Government Employee					
Educational employee	76.8	84.0	58.5	88.2	67.4
Local government employee	73.3	79.2	65.0	69.5	59.1
State government employee[c]	57.1	76.8	48.2	67.3	52.7
Federal government employee	54.8	68.8	54.7	71.9	54.7
No local, state, or federal employees in household	53.1	69.6	47.6	63.5	53.0

Table C-1 (continued)

EXPECTATION THAT PROPOSITION 2 1/2 WILL LEAD TO CUTS IN VARIOUS EDUCATION SERVICES[a,b]

By Demographic Characteristics

	Public Elementary and Secondary Education	After School Programs	Special Education	Adult Education	Public Colleges
Local Tax Share					
Owners: Less than 75% of community avg.	57.3%	70.7%	48.0%	61.8%	52.4%
Owners: 75% to <100% of community avg.	51.8	73.3	48.6	66.9	52.6
Owners: 100% to <125% of community avg.	51.4	72.0	49.1	68.0	54.3
Owners: 125% or more of community avg.	52.4	71.8	38.3	67.4	52.0
Owners: no tax information given	49.6	67.3	45.1	61.1	45.1
Renters: never owned, no plans to own	59.0	66.4	52.7	61.3	48.0
Renters: Ever owned	61.4	71.6	59.7	68.2	60.8
Renters: Plan to own	50.0	65.8	48.3	60.0	48.3
Neither rent nor own	65.1	74.4	48.8	62.8	67.4
Political Ideology					
Very conservative	56.1	65.2	51.5	62.7	53.0
Fairly conservative	55.1	74.1	47.1	67.8	54.7
Middle of the road	51.0	66.3	46.0	61.2	51.5
Fairly liberal	66.7	80.5	59.4	75.1	59.0
Very liberal	66.7	76.7	58.4	68.6	58.0

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[a] Based on the questions: "Now that Proposition 2 1/2 has passed, what do you think will happen to services I read. Using the first list of phrases tell me whether you think there will be a lot less, a little less, the same, a little more or a lot more ("X'd ITEM") services now that Proposition 2 1/2 has passed?"

[b] Each entry is the percentage of respondents who think there will be a lot less or a little less of that particular service. Percentages are based on those responding to the question.

[c] "State government employee" includes county employees.

Table C-II

ANTICIPATED EFFECTS OF PROPOSITION 2 1/2 ON SCHOOL BUDGETS

By Demographic Characteristics

	Proposition 2 1/2 will:	
	Decrease funds for local public schools	Give local voters more control over school spending
Total	69.6%	71.0%
Sex		
Female	69.4	67.9
Male	69.0	73.7
Race		
Non-white	56.2	60.7
White	70.0	71.4
Religion		
Catholic	68.8	74.4
Jewish	74.4	61.5
Protestant	68.6	69.0
Other, no religion	69.3	66.8
Stage in Life Cycle		
Young, no children	71.5	63.3
Children present, oldest <6	71.9	70.7
Children present, oldest 6-17	67.4	69.8
Older adults, no children	69.9	73.2
Elderly (60+) adults, no children	67.0	80.9
Service Usage		
Children in public schools	66.2	70.3
No children in public schools	70.6	71.1
Education		
Less than high school	66.0	69.8
High School degree	65.6	76.0
Some college	66.3	72.6
College degree	71.9	67.0
Graduate school	83.7	60.4

Table C-II (continued)

ANTICIPATED EFFECTS OF PROPOSITION 2 1/2 ON SCHOOL BUDGETS

By Demographic Characteristics (continued)

	Proposition 2 1/2 will:	
	Decrease funds for local public schools	Give local voters more control over school spending
Household Income		
Less than $10,000	66.9%	68.4%
$10,000 to <$20,000	66.8	68.2
$20,000 to <$30,000	69.5	72.9
$30,000 to <$50,000	71.6	73.3
$50,000 or more	77.6	68.1
Occupation of Household Head		
Professional	75.0	67.5
Managerial	71.8	72.7
Clerical, sales	64.6	72.0
Blue collar	66.7	74.1
Service	61.8	61.0
Not reported	66.9	71.8
Government Employee		
Educational employee	72.8	63.8
Local government employee	81.2	64.5
State government employee	64.3	70.2
Federal government employee	74.6	70.3
No local, state, or federal employees in household	67.7	72.1
Local Tax Price		
Owners: Less than 75% of community avg.	68.4	75.1
Owners: 75% to <100% of community avg.	70.1	72.5
Owners: 100% to <125% of community avg.	66.8	76.0
Owners: 125% or more of community avg.	68.3	71.8
Owners: Taxes not reported	66.4	76.1
Renters: never owned, no plans to own	60.9	57.8
Renters: Ever owned	70.4	57.4
Renters: Plan to own	65.8	66.7
Neither rent nor own	74.4	65.1

Table C-II (continued)

ANTICIPATED EFFECTS OF PROPOSITION 2 1/2 ON SCHOOL BUDGETS

By Demographic Characteristics (continued)

	Proposition 2 1/2 will:	
	Decrease funds for local public schools	Give local voters more control over school spending
Political Ideology		
Very conservative	71.2%	73.3%
Fairly conservative	71.0	74.2
Middle of the road	66.7	74.4
Fairly liberal	69.8	63.8
Very liberal	76.0	56.1

---

[a] Based on the question: "Next I will read a list of some of the effects that the passage of Proposition 2 1/2 might have in Massachusetts. Look at list three that you wrote down from "agree a lot" to "disagree a lot". To what extent do you agree or disagree that Proposition 2 1/2 will _______?"

[b] Each entry is the percentage of respondents who "agree a lot" or "agree a little" with that particular statement. Percentages are based on those responding to the question.

[c] "State government employee" includes county employees.

APPENDIX D

STATISTICAL SIGNIFICANCE OF PERCENTAGE DIFFERENCES

STATISTICAL SIGNIFICANCE OF PERCENTAGE DIFFERENCES

Table D-I is a guide for determining the significance (two standard errors) of differences in percentages between any two subgroups in the overall sample. The size of the difference necessary for significance decreases as the sample sizes increase and as the percentages being compared move away from 50 percent in either direction. Thus, a separate table is presented for each of four sets of percentages. The entries in each cell define the range of necessary differences for samples of varying sizes. The lower number is the difference required for significance between two simple random samples. The higher number, 1.25 times the lower number, is a conservative estimate of the difference required for significance when other sample designs are used.

A stratified random cluster sample plan was used in this study. Stratification reduces the size of the standard errors relative to those in simple random samples; clustering increases the size of the standard errors. Because the sampling plan incorporated a large number of clusters (65) with a small number of interviews in each cluster (15 to 25), any increase in standard errors due to clustering should be minor and more than offset by the decreases gained through stratification. Thus the entries at the lower end of each scale represent conservative estimates of the difference in percentages required for significance between any two subgroups in this study.

The sizes of the subgroups analyzed in this paper are presented in Table D-II.

Table D-I

EXAMPLE OF SAMPLING ERRORS OF DIFFERENCES BETWEEN PERCENTAGES[1]

No. of Interviews	No. of Interviews							
	2000	1000	700	500	400	300	200	100
For Percentages from 35 to 65								
2000	3.2–4.0	3.9–4.9	4.4–5.5	5.0–6.2	5.5–6.9	6.2–7.8	7.4–9.2	10–12
1000		4.5–5.6	4.9–6.1	5.5–6.9	5.9–7.4	6.6–8.3	7.7–9.6	10–13
700			5.3–6.6	5.9–7.4	6.3–7.9	6.9–8.6	8.0–10	11–13
500				6.3–7.9	6.7–8.4	7.3–9.1	8.4–10	11–13
400					7.1–8.9	7.6–9.5	8.7–11	11–14
300						8.2–10	9.1–11	12–14
200							10–12	12–15
100								14–17
For Percentages around 20 and 80								
2000	2.5–3.1	3.1–3.9	3.5–4.4	4.0–5.0	4.4–5.5	5.0–6.2	5.9–7.4	8.2–9.8
1000		3.6–4.5	3.9–4.9	4.4–5.5	4.7–5.9	5.3–6.6	6.2–7.8	8.4–10
700			4.3–5.4	4.7–5.9	5.0–6.2	5.5–6.9	6.4–8.0	8.6–10
500				5.1–6.4	5.4–6.8	5.8–7.2	6.7–8.4	8.8–11
400					5.7–7.1	6.1–7.6	6.9–8.6	9.0–11
300						6.5–8.1	7.3–9.1	9.2–11
200							8.0–10	9.8–12
100								11–14
For Percentages around 10 and 90								
2000	1.9–2.4	2.3–2.9	2.6–3.2	3.0–3.8	3.3–4.1	3.7–4.6	4.4–5.5	
1000		2.7–3.4	3.0–3.8	3.3–4.1	3.6–4.5	4.0–5.0	4.6–5.8	
700			3.2–4.0	3.5–4.4	3.8–4.8	4.1–5.1	4.8–6.0	
500				3.8–4.8	4.0–5.0	4.4–5.5	5.0–6.2	
400					4.2–5.2	4.6–5.8	5.2–6.9	
300						4.9–6.1	5.5–6.9	
200							6.0–7.5	
For Percentages around 5 and 95								
2000	1.4–1.8	1.7–2.1	1.9–2.4	2.2–2.8	2.4–3.0	2.7–3.4		
1000		1.9–2.4	2.1–2.6	2.4–3.0	2.6–3.2	2.9–3.6		
700			2.3–2.9	2.6–3.2	2.7–3.4	3.0–3.8		
500				2.8–3.5	2.9–3.6	3.2–4.0		
400					3.1–3.9	3.3–4.1		
300						3.6–4.5		

TABLE 14.1.III **Example of Sampling Errors of Differences between Percentages**

The values shown are the differences required for significance (two standard errors) in comparisons of percentages derived from *two different subgroups* of the survey. Two values—low and high—are given for each cell.

These generalized and approximate values of $2\,\mathrm{se}\,(p - p')$ represent the results of many computations. The low values are merely $2[PQ(1/n + 1/n')]^{1/2}$, corresponding to two simple random samples. The high values are about 1.25 greater. Most of the actually computed values of the standard error fell between these two boundaries. (*Source:* Freedman, Whelpton, and Campbell [1959].)

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[1] Leslie Kish, Survey Sampling. New York: John Wiley and Sons, Inc., 1965, p. 580.

Table D-II

NUMBER OF RESPONDENTS IN EACH DEMOGRAPHIC CATEGORY

Demographic Characteristics	Number in Sample
Total	1586
Sex	
Male	798
Female	788
Race	
Non-white	96
White	1,490
Religion	
Catholic	781
Jewish	92
Protestant	453
Other, no religion	260
Stage in Life Cycle	
Young, no children	324
Children present, oldest <6	182
Children present, oldest 6-17	542
Older adults, no children	307
Elderly (60+) adults, no children	231
Services Used	
Public elementary and secondary education	519
After school programs	300
Special education	132
Adult education	329
Public colleges	346
Education	
Less than high school	178
High school degree	520
Some college	353
College degree	321
Graduate school	180
Income	
Less than $10,000	169
$10,000 to <$20,000	484
$20,000 to <$30,000	477
$30,000 to <$50,000	356
$50,000 or more	69

Table D-II (continued)

NUMBER OF RESPONDENTS IN EACH DEMOGRAPHIC CATEGORY

Demographic Characteristics	Number in Sample
Occupation of Household Head	
Professional	395
Managerial	305
Clerical, sales	195
Blue collar	418
Service	106
Not reported, no occupation	167
Government Employee	
Educational employee	96
Local government employee	121
State government employee	57
Federal government employee	65
No local, state or federal employees in household	1,247
Local Tax Share	
Owners: Less than 75% of community avg.	225
Owners: 75% to <100% of community avg.	251
Owners: 100% to <125% of community avg.	175
Owners: $\geq$125% of community avg.	227
Owners: Taxes not reported	113
Renters: Never owned, no plans to	256
Renters: Ever owned	176
Renters: Plan to own	120
Neither rent nor own	43
Political Ideology	
Very conservative	136
Fairly conservative	405
Middle of the road	593
Fairly liberal	297
Very liberal	104

TAX LIMITATIONS IN MASSACHUSETTS
APPENDICES

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January 1982

Appendix A

COMPLETE SAMPLING PLAN

The Basic Sample

A total of 1,561 interviews were administered to male and female household heads selected by a state-wide stratified random cluster sampling plan. Strata were defined to insure that interviews would be spread proportionately across communities characterized by the full range of property wealth and expenditure levels. Interviews were clustered in cities and towns within these strata in order to provide information appropriate for testing median voter models.

The sample was drawn in five stages. First, each of the 351 Massachusetts cities and towns was grouped into one of the 15 cells shown in Table A1. These cells are based on four property wealth and four expenditure categories.[1] We consolidated the two cells defined by the highest wealth and the two lowest expenditure levels because of the small proportion of the state's population they represent. We assigned a quota of interviews to each of these 15 cells in proportion to the percentage of the state's population residing in that cell.[2]

Within each cell, cities and towns were grouped into substrata defined by population size and percent of owner-occupied housing. This categorization reflects our view that preferences for public services vary between renters and homeowners and with town and city size. The size of the jurisdiction reflects both the ability of the individual voter to influence the public sector decision-making process and in many cases the form of government; most large jursidictions in Massachusetts are cities with a mayor-council government while most of the small jurisdictions are towns run by selectmen and town-meeting.

Tables A2-1 through A2-15 show the population and percent of owner-occupied units for each city and town in the fifteen wealth and expenditure categories.

Boxes enclose the 33 substrata of similar cities and towns. By grouping cities and towns along these four dimensions (per capita wealth, per capita expenditures, population and percent owner-occupied) clusters can be randomly selected from strata that are internally homogenous, but that differ from one another as much as possible along the critical dimensions. Interviews were assigned to each of these substrata approximately in proportion to the percentage of the stratum population residing in each substratum (see Table A-3).

To assure enough observations from individual jurisdictions to test median voter models, we chose to cluster our interviews in selected cities and towns rather than to spread them randomly across each substratum. Thus the third stage of our sampling procedure involved the random selection of cities and towns from each substratum. These jurisdictions form the clusters from which we randomly selected households for the final sample. Before choosing our communities, we excluded all towns with fewer than 2,500 residents. Because the census does not gather data on the social and economic characteristics of such towns, additional information to supplement that gathered in the personal interview is not available. These towns comprise only 1.7 percent of the state's population.

The remaining towns and cities were listed alphabetically by substratum and were given one chance to be selected for each 5,000 residents. Using a random number table, we selected units of 5,000 residents. This procedure allows larger cities to be randomly selected as cluster points more than one time. In general, 25 interviews were allocated to each unit or cluster point. In some cases, we allocated fewer than 25 to a cluster point in order to obtain a reasonable distribution of interviews across substrata within any given wealth/expenditure stratum.

In each randomly selected city or town, telephone numbers were selected in a two-stage process. First, the initial four digits of exchanges currently in use were selected in proportion to their number in the total population of telephone numbers. This "screening" process minimized the amount of time spent dialing numbers that were not in use. In the second stage a random number process assigned the last three digits to the four-digit stem. As a result, all phone numbers in use in the jurisdiction, not merely publicly listed phone numbers, had an equally likely chance of being selected for our sample.

The numbers selected in this manner, called starting points, were given to professional interviewers. If no interview was obtained at the starting point number, the interviewer added 10 to the original telephone number and made another attempt. This process of adding 10 to the telephone number was repeated up to four times until five attempts had been made to obtain an interview based on the starting point number. If no interview was completed after the use of five variations of the original number, another starting point number was drawn.

In the final stage of the sampling process, we selected individual respondents in each household. Interviews were restricted to male and female household heads. We excluded other voting-age household members because the purpose of the study is to focus on the behavior, preferences and orientation of household members most concerned with property tax payments. The sex of the household head to be interviewed was randomly selected after initial contact with the household had been made.

The Oversample

We supplemented the 1,561 state-wide interviews with additional interviews administered to 94 randomly selected households in Boston and 50 randomly selected black households. This brings the total number of Boston resident interviews to 248 and the total number of black interviews to 93.

This oversampling provides us with two subsamples sufficiently large for separate analysis. Specifically, it allows us to analyze the preferences, attitudes, and voting behavior of both Boston households and black households. It should be noted that the state-wide analysis does not include these additional interviews.

The additional Boston and black households were selected in the same manner as the basic sample. In Boston, additional root exchanges were randomly selected. In the case of blacks, we used root telephone exchanges of black respondents in the basic sample of 1,561 as starting points for locating additional black households.

Table A1

NUMBER AND PERCENT OF POPULATION AND INTERVIEW QUOTAS

By Per Capita Wealth and Expenditure Strata

Per Capita Expenditures		Per Capita Wealth			
		less than $10,771	$10,771-$13,906	$13,906-$18,160	more than $18,160
Less than $625	1980 population	369,506	93,927	37,649	54,092
	% of state population	6.44%	1.64%	0.66%	0.94%
	Interview quota	100	25	20	25
	% of total interview quota	6.44%	1.61%	1.3%	1.61%
$625-$717	1980 population	927,721	297,851	177,272	
	% of state population	16.17%	5.19%	3.09%	
	Interview quota	255	75	50	
	% of total interview quota	16.42%	4.83%	3.22%	
$717-$838	1980 population	447,657	702,898	308.101	75,679
	% of state population	7.80%	12.25%	5.4%	1.32%
	Interview quota	125	175	75	30
	% of total interview quota	8.04%	11.27%	4.83%	1.93%
More than $838	1980 population	993.083	260.715	476,603	515,507
	% of state population	17.31%	4.54%	8.31%	8.98%
	Interview quota	273	75	120	130
	% of total interview quota	17.58%	4.83%	7.73	8.37%

Table A2-1

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure I (less than $625), Per Capita Wealth I (less than $10,771)

			Percent Owner Occupied (1970)				
pulation (1980)	NA	<50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
.500			Hardwick (2/55)	Ashby (2/67) Russell (2/70)	Buckland (2/73) Huntington (2/73) Millville (2/72)	Clarksburg (2/81) E. Brookfield (2/80)	
.500-<5,000	SUBSTRATUM I, I A			Warren (4/68)	Berkeley (3/77) Cheshire (3/78) Rutland (4/78) Upton (4/71)		
,000-<10,000			Montague (8/60) Shirley (5/56) Ware (9/60)	Blackstone (7/64) Charlton (7/68) *Dudley (9/62) Lancaster (6/64) Orange (7/67) Uxbridge (8/63)	Leicester (9/78) Templeton (6/80)	Acushnet (9/81) *Halifax (6/82)	
0,000-<20,000		Harvard (12/31) Southbridge (17/46) SUBSTRATUM I, I B	Spencer (11/58) *Clinton (13/55) Northbridge (12/52) Winthrop (19/54)	Athol (11/67) Adams (10/60) Easthampton (16/62)	Fairhaven (16/75) South Hadley (16/73)		
0,000-<30,000						Dracut (21/83)	
0,000-<40,000		Amherst (33/47) SUBSTRATUM I, I C		*Leominster (34/62)			

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a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

Table A2-2

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure I (less than $625), Per Capita Wealth II ($10,771-$13,906)

pulation (1980)	NA	< 50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
,500				Shelbourne (2/63)	Bernardston (2/77) Chester (1/76) Hinsdale (2/72) Williamsburg (2/74)		
	SUBSTRATUM I, III A						
500-<5,000	Sunderland (3/40)			Barre (4/67)	Ashburnham (4/78) Boylston (3/80) W. Brookfield (3/71)	Lanesborough (3/80) Newbury (4/81) Southhampton (4/88)	
000-<10,000				Belchertown (6/70) Williamstown (9/68)	Dalton (7/72)	Townsend (7/82)	
,000-<20,000				Palmer (11/67)		*Swansea (15/85)	

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a. Table entires are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

Table A2-3

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure I (less than $625), Per Capita Wealth III ($13,906-$18,160)

	Percent Owner Occupied (1970)						
opulation (1980)	NA	< 50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
2,500	Blandford (1/NA) Charlemont (1/NA) Conway (1/NA) Montgomery (1/NA) Phillipston (1/NA) Royalston (1/NA) Washington (1/NA)			W. Stockbridge (1/67)	Leverett (1/84) Whately (1/79)	Colrain (1/82) Dunstable (2/86)	
	SUBSTRATUM I, III, A						
2,500-<5,000	Mendon (3/NA)					Wenham (4/82)	Paxton (4/93)
5,000-<10,000				*Groton (6/67)		Hamilton (7/83)	

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a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

Table A2-4

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure I and II (less than $717), Per Capita Wealth IV (more than $18,160)

	Percent Owner Occupied (1970)						
opulation (1980)	NA	<50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
500	Goshen (1/NA) Hancock (1/NA) Middlefield (b/NA) Windsor (1/NA) Worthington (1/NA) Monterey (1/NA) New Ashford (b/NA) Peru (1/NA) Westhampton (1/NA)		New Marlborough (1/51)	Edgemont (1/60) Richmond (2/69) Ashfield (1/69) Northfield (2/61)		Granville (1/82)	
	SUBSTRATUM I-II, IV A						
500-<5,000				Deerfield (5/65) Sheffield (3/63)	Bolton (3/78)		
000-<10,000						Westminster (5/85) Topsfield (5/84)	
0,000-<20,000						*Yarmouth (18/84)	

a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

b. Population less than 500

Table A2-5

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure II ($625-$717), Per Capita Wealth I (less than $10,771)

	Percent Owner Occupied (1970)						
Population (1980)	NA	<50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
<2,500	New Braintree (1/NA)						
2,500-<5,000				N. Brookfield (4/67)	Merrimac (4/75)		
5,000-<10,000				SUBSTRATUM II, I A	Monson (7/74)	Granby (5/83)	
10,000-<20,000			Gardner (18/58) N. Adams (18/52) Webster (14/50) SUBSTRATUM II, I B	*Greenfield (18/61)	Abington (14/78) Grafton (11/70) Hudson (16/72) Mulberry (12/72) *Oxford (12/75) Whitman[b] (11/75)	*Bellingham (14/85)	
20,000-<30,000			*Northampton (29/57)				
30,000-<40,000				Methuen (37/69)			
40,000-<50,000		*HOLYOKE (44/36)	TAUNTON (45/60)				
50,000-<60,000		*MALDEN (53/47)	CHICOPEE (55/55) *MEDFORD (58/60)				
≥60,000		*LAWRENCE (63/33) *FALL RIVER (92/32) LOWELL (92/44) *NEW BEDFORD (98/42) SOMERVILLE (77/34)	SUBSTRATUM II, I C				

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a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

b. Population less than 500.

Table A2-6

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure II ($625-$717), Per Capita Wealth II ($10,771-$13,906)

opulation (1980)	Percent Owner Occupied (1970)						
	NA	<50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
2,500	New Salem (1/NA)			Brookfield (2/68)	Berlin (2/79) Gill (1/77)		
2,500-<5,000					Hatfield (3/78) Rowley (4/79)	Hampden (5/88)	
5,000-<10,000					Norfolk (6/79) Pepperell (8/70) Southwick (7/74) Sutton (6/74) Tyngsborough (6/73) Wrentham (7/73)	Groveland (5/84) Lakeville (6/84) SUBSTRATUM II,II A	
0,000-<20,000					Northborough (11/78) Ludlow (18/78)	Auburn (15/86) Holden (13/87) *Pembroke (13/90)	
0,000-<30,000				Agawam (22/69) N.Attleborough (21/68) *W.Springfield (27/60)	Stoughton (24/77)	Shrewsbury (23/82)	
0,000-<40,000				*WESTFIELD (36/69)		SUBSTRATUM II,II B	

a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

Table A2-7

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure II ($625-$717), Per Capita Wealth III ($13,906-$18,160)

opulation (1980)	Percent Owner Occupied (1970)						
	NA	<50%	50–<60%	60–<70%	70–<80%	80–<90%	90–<100%
2,500	Chesterfield (1/NA) Cummington (1/NA) Hawley (b/NA) Pelham (1/NA) Wendell (1/NA)				Petersham (1/74)	Brimfield (2/81) Plympton (2/90)	
			SUBSTRATUM II, III A				
2,500–<5,000				Nahant (4/70)	Boxborough (3/76)		
5,000–<10,000				Great Barrington (7/61)	Kingston (7/74) Plainville (6/75)	Dighton (5/81) Freetown (7/82) Rehoboth (8/81) W. Boylston (6/82)	
0,000–<20,000					*Westport (14/70)	Seekonk (12/85)	Wilbraham (12/91)
			SUBSTRATUM II, IIIB				
0,000–<30,000				Stoneham (21/64)		*Dartmouth (24/83) Milton (26/85)	

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a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper class letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner-occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

b. Population less than 500.

Table A2-8

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure III ($717-$838), Per Capita Wealth I (less than $10,771)

	Percent Owner Occupied (1970)						
pulation 1980)	NA	<50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
000-<10,000	Ayer (7/43)			Winchendon (7/62)			
000-<20,000				Middleborough (16/70)	Franklin (18/78) Rockland (11/77)		
000-<30,000				*Melrose (30/70) Milford (23/64)			
000-<40,000	SUBSTRATUM II,I A		FITCHBURG (39/51)	SUBSTRATUM III,I B			
000-<50,000			*REVERE (42/54)				
000			*BROCKTON (95/57). *SPRINGFIELD (152/51)				

Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

Table A2-9

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure III ($717-$838), Per Capita Wealth II ($10,771-$13,906)

opulation (1980)	NA	< 50%	50–<60%	60–<70%	70–<80%	80–<90%	90–<100%
				Percent Owner Occupied (1970)			
500	Wales (1/NA)					Hubbardston (2/33)	
500–<5,000				Douglas (4/69)	Hopedale (4/71)		
00–<10,000				Maynard (9/68) SUBSTRATUM III,II A	Carver (7/77) Georgetown (6/79) Lee (6/72) Millis (7/78)	E.Bridgewater (10/81) Hanson (9/86) Lunenburg (8/32) Raynham (9/89) W.Bridgewater (6/88)[b]	
,000–<20,000				NEWBURYPORT (16/64)	Bridgewater (17/76) Ipswich (11/72) Mansfield (13/72)	Easton (17/84) Holbrook (11/84) Holliston (13/82) [illegible] Reading (11/88) Westford (13/84)	
,000–<30,000					*Wakefield (25/73)	*Randolph (28/80) Reading (23/82) *Tewksbury (24/89)	
0,000–<40,000	SUBSTRATUM III, I B	Watertown (34/47)		*ATTLEBORO (34/62) *BEVERLY (37/65) MARLBOROUGH (31/62)		Chelmsford (31/83)	
0,000–<50,000			*Arlington (45/80)				
0,000–<60,000				PITTSFIELD (52/61)	Weymouth (55/74)		
0,000–<70,000			*Framingham (65/59)				

Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

1980 population not available. 1970 estimate used.

Table A2-10

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure III ($717-$838), Per Capita Wealth III ($13,906-$18,160)

Population (1980)	Percent Owner Occupied (1970)						
	NA	<50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
<2,500	Oakham (1/NA) Warwick (1/NA)					Princeton (2/85)	
2,500-<5,000			SUBSTRATUM III, III A		Essex (3/70) Hadley (4/70)	Rochester (3/84)	
5,000-<10,000				Lenox (7/62)	Ashland (9/78) Hopkinton (7/77) Littleton (7/79) Mattapoisett (6/72) Salisbury (6/70) Sturbridge (6/74)	Avon (5/84) Stow (5/84) W. Newbury (3/87)	
10,000-<20,000					Acton (18/73) Wareham (19/75) Westborough (14/71)		*E.Longmeadow (13/92)
20,000-<30,000				Belmont (26/65)	*Dedham (25/79)	Saugus (25/84)	
30,000-<40,000	SUBSTRATUM III, III B			WOBURN (37/66)			
0,000		*WALTHAM (58/48)					

a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

Table A2-11

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure III ($717-$838), Per Capita Wealth IV (more than $18, 160)

	Percent Owner Occupied (1970)						
opulation (1980)	NA	< 50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
,500	Alford (b/NA) Becket (1/NA) Holland (2/NA) Leydon (b/NA) Otis (1/NA) Sandsfield (1/NA) Shutesbury (1/NA) Tyringham (b/NA)			Stockbridge (2/62)			
,500-<5,000					SUBSTRATUM III,IV B Marion (4/74)		
,000-<10,000	SUBSTRATUM III,IV A		*Lincoln (7/57)	Rockport (6/61)		Boxford (5/89)	
,000-<20,000	Dennis (12/48)						*Lynnfield (11/95)
,000-<30,000				N.Andover (20/62)			

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a. Table entries are all Massachusetts communities in the designated stratum by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities, upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from a substratum for a final sample. N.A. indicates information for categorization is not available.

b. 1980 population not available. 1976 estimate used.

Table A2-12

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure IV (more than $838), Per Capita Wealth I (less than $10,771)

		Percent Owner Occupied (1970)					
pulation 1980)	NA	< 50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
000-<10,000			SUBSTRATUM IV,I A	Hull (10/68)			
000-<20,000				Amesbury (14/63)			
	SUBSTRATUM IV, I B						
000-<30,000		*CHELSEA (25/28)					
000-<40,000							
000-<50,000			*HAVERHILL (47/55)				
000		*CAMBRIDGE (95/19)					
	SUBSTRATUM IV,I C	*LYNN (78/45) *WORCESTER (161/46)					
	SUBSTRATUM IV,I D	*BOSTON (562/27)					

a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper class letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

Table A2-13

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure IV (more than $838), Per Capita Wealth II ($10,771-$13,906)

			% Owner Occupied in 1970				
opulation (1980)	NA	<50%	50–<60%	60–<70%	70–<80%	80–<90%	90–<100%
0,000–<20,000		SUBSTRATUM IV, II A			Foxborough (14/71) Norton (13/74)		
20,000–<30,000				Norwood (29/62)			
30,000–<40,000		*SALEM (38/46)				Billerica (37/85)	
40,000–<50,000					*PEABODY (46/72)		
>50,000	SUBSTRATUM IV,II B		*QUINCY (84/56)				

a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

Table A2-14

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure IV (more than $838), Per Capita Wealth III ($13,906-$18,160)

	Percent Owner Occupied (1970)						
pulation (1980)	NA	<50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
,500	Monroe (1/NA)						
,500-<5,000					SUBSTRATUM IV, III A		
,000-<10,000					Medway (8/78) Middleton (4/72)	Norwell (9/90)	
,000-<20,000					Canton (18/20) Swampscott (14/76)	Medfield (10/84) Scituate (18/84)[b] *Sharon (14/85) *Walpole (18/82)	Hanover (11/91) Longmeadow (16/96) Wilmington (17/90)
0,000-<30,000			GLOUCESTER (28/60)		Danvers (24/76) Natick (29/79) Winchester (21/77)	Hingham (20/86) Marshfield (21/86)	
0,000-<40,000			SUBSTRATUM IV, III, B			*Braintree (36/85)	
0,000-<50,000	SUBSTRATUM IV, III C						
0,000-<60,000		*Brookline (55/27)					
0,000					*NEWTON (83/71)		

a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

b. 1980 population not available. 1976 estimate used.

Table A2-15

STRATIFICATION OF CITIES AND TOWNS IN MASSACHUSETTS[a]

Stratum: Per Capita Expenditure IV (more than $838), Per Capita Wealth IV (more than $18,160)

Population (1980)	NA	<50%	50-<60%	60-<70%	70-<80%	80-<90%	90-<100%
			Percent Owner Occupied (1970)				
<2,500	Chilmark (b/NA) Edgartown (2/NA) Erving (1/NA) Florida (1/NA) Gayhead (b/NA) Gosnold (b/NA) Heath (b/NA) Mt. Washington (b/NA) Plainfield (b/NA) Rowe (b/NA) Savoy (1/NA) Tolland (b/NA W. Tisbury (1/NA)		Wellfleet (2/58)			Oak Bluffs (2/81	
2,500-<5,000	SUBSTRATUM IV, IV A		Carlisle (3/59)	Eastham^c (3/63) Tisbury^c (3/64)	Mashpee^c (4/73)	Dover (5/86) Sherborn (4/88) *Provincetown^c (4/88)	
5,000-<10,000	Brewster^c (5/NA) Harwich^c (9/NA) Sandwich^c (9/NA)		SUBSTRATUM IV, IV B	Chatham^c (8/61) Manchester^c (5/65) Nantucket^c (5/66) *Orleans^c (5/67)	Cohasset^c (7/77) Southborough (6/80)		
10,000-<20,000			Bourne^c (14/56)	Truro^c (11/61)	Concord (16/79)	Bedford (13/80) Duxbury^c (12/83) * Somerset (19/80)	Sudbury (14/93) Wayland (12/91) Weston (11/90) Westwood (13/93)
20,000 -<30,000				SUBSTRATUM IV, IV B	*Andover (26/72) Falmouth^c (24/73) Marblehead^c (20/72)	Lexington (30/87) *Needham (27/84) Wellesley (27/81)	Burlington (23/94)
30,000+		SUBSTRATUM IV, IV C * EVERETT (37/43)		Plymouth (36/62)	Barnstable^c (31/78)		

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a. Table entries are all Massachusetts communities in the designated stratum arranged by 1980 population (preliminary) and percent of dwelling units that were owner occupied in 1970. Upper case letters denote cities; upper and lower case letters denote towns. Numbers in parentheses are 1980 population in thousands and 1970 percent of owner-occupied dwelling units. Boxes bound substrata defined primarily by population and percent owner occupied. An asterisk (*) denotes that the community was selected randomly from the substratum for the final sample. N.A. indicates information for categorization is not available.

b. Population less than 500.

c. Primarily seasonal residential and resort areas.

d. Substratum IV, IVA includes all towns over 2,500 not included in Substrata IV,IVB or IV, IVC.

Table A3

INTERVIEW QUOTAS AMONG SUBSTRATA

Per Capita Expenditures	Per Capita Wealth	Substrata	Population	Percentage of Stratum Population in Cities/Towns Greater than 2,500	Interview Quota
less than $625	less than $10,771	I, IA	176,979	49.97	50
		I, IB	109,690	30.97	25
		I, IC	67,528	19.07	25
		Remainder	15,309		
		Total	369,506		
less than $625	$10,771- $13,906	I, IIA	85,098	100.00	25
		Remainder	8,829		
		Total	93,927		
less than $625	$13,906- $18,160	I, IIIA	23,803	100.00	20
		Remainder	13,846		
		Total	37,649		
less than $717	more than $18,160	I-II, IVA	38,957	100.00	25
		Remainder	15,135		
		Total	54,092		
$625- $717	less than $10,771	II, IA	113,567	12.25	40
		II, IB	134,241	14.48	40
		II, IC	679,236	73.27	175
		Remainder	677		
		Total	927,721		
$625- $717	$10,771- $13,906	II, IIA	115,575	39.67	25
		II, IIB	175,744	60.33	50
		Remainder	6,532		
		Total	297,851		
$625- $717	$13,906 $18,160	II, IIIA	97,198	57.7	25
		II, IIIB	71,260	42.3	25
		Remainder	8,814		
		Total	177,272		
$717- $838	less than $10,771	III, IA	335,786	75.01	100
		III, IB	111,871	24.99	25
		Remainder	0		
		Total	447,657		
$717- $838	$10,771 $13,906	III, IIA	342,740	48.97	75
		III, IIB	357,201	51.03	100
		Remainder	2,957		
		Total	702,898		
$717- $838	$13,906- $18,160	III, IIIA	209,258	68.81	50
		III, IIIB	94,831	31.19	25
		Remainder	4,012		
		Total	308,101		
$717- $838	more than $18,160	III, IVA	45,899	69.05	20
		III, IVB	20,569	30.95	10
		Remainder	9,211		
		Total	75,679		
more than $838	less than $10,771	IV, IA	70,511	7.10	20
		IV, IB	120,771	12.16	40
		IV, IC	239,683	24.14	63
		IV, ID	562,118	56.60	150
		Remainder	0		
		Total	993,083		
more than $838	$10,771- $13,906	IV, IIA	176,811	67.82	50
		IV, IIB	83,904	32.18	25
		Remiander	0		
		Total	260,715		
more than $838	$13,906- $18,160	IV, IIIA	310,632	65.20	75
		IV, IIIB	111,098	23.32	30
		IV, IIIC	54,675	11.48	15
		Remainder	198		
		Total	476,603		
more than $838	more than $18,160	IV, IVA	286,661	56.98	75
		IV, IVB	179,295	35.64	45
		IV, IVC	37,171	7.39	10
		Remainder	12,380		
		Total	515,507		

Table A4
STRATIFIED RANDOM CLUSTER SAMPLE—
QUOTA OF INTERVIEWS IN EACH RANDOMLY SELECTED TOWN/CITY[a]
By Per Capita Expenditure and Per Capita Wealth Categories

	Per Capita Wealth							
	I(less than $10,771)		II($10,771-$13,906)		III$13,906-$18,160)		IV(more than $18,160)	
Per Capita Expenditure	CITY/Town	# of Interviews	CITY/Town	# of Interviews	CITY/Town	# of Interviews	CITY/Town	# of Interviews
I (less than $625)	Clinton	25	Swansea	25	Groton	20	Yarmouth	25
	Dudley	25						
	Halifax	25						
	LEOMINSTER	25						
II ($625-$717)	Bellingham	20	Pembroke	25	Dartmouth	25		
	FALL RIVER	25	Westfield	25	Westport	25		
	Greenfield	20	W.Springfield	25				
	HOLYOKE	25						
	Lawrence	25						
	MALDEN	50						
	MEDFORD	25						
	NEW BEDFORD	25						
	NORTHAMPTON	20						
	Oxford	20						
III ($717-$838)	BROCKTON	25	Arlington	25	Dedham	25	Lincoln	20
	MELROSE	25	ATTLEBORO	25	E.Longmeadow	25	Lynnfield	10
	REVERE	25	BEVERLY	25	Waltham	25		
	SPRINGFIELD	50	Framingham	25				
			Randolph	25				
			Tewksbury	25				
			Wakefield	25				
IV (more than $838)	BOSTON	150	PEABODY	25	Braintree	25	Andover	25
	CAMBRIDGE	25	QUINCY	25	Brookline	15	EVERETT	10
	CHELSEA	15	SALEM	55	NEWTON	30	Needham	25
	HAVERILL	20			Sharon	25	Orleans	25
	LYNN	21			Walpole	25	Provincetown	20
	WORCESTER	42					Somerset	25

---

a. In a few cases, the actual number of interviews differs slightly from the quotas listed in the table. In one case, however, the difference is substantial. Only 25 of the 55 interviews planned for Salem were conducted.

Footnotes

[1] The categories were developed by the Massachusetts Taxpayers' Foundation for simulations of the effects of alternative tax limitation measures. The per capita wealth and expenditures are based on 1976 population figures.

[2] We would prefer to allocate interviews among strata in proportion to the number of resident households rather than in proportion to population. 1980 Census data on households were not available, however. Census population figures include students and other persons living in institutions. To the extent that these people live in areas characterized by below average household size, Census population serves as an adequate proxy for the number of resident households.

Appendix B

QUESTIONNAIRE

A questionnaire was designed to gather data in the following areas:

I. PROPOSITION 2½

A. How did respondents vote on Proposition 2½? If Proposition 2½ had been a constitutional amendment, would they have voted differently? How would non-voters have voted? How did respondents vote on Question 3?

B. Anticipated effects of Proposition 2½? What did respondents think the overall effect of Proposition 2½ would be on taxes, governmental efficiency and state aid? How would it affect certain specific services such as police and education? How would it affect the taxes paid and services used by the respondent's household?

II. PUBLIC SERVICES

A. Perception of the overall level of public services. How do respondents think their public services compare with those provided in other towns, in other neighborhoods in the same jurisdiction, and in their jurisdiction two years ago?

B. Desired public service levels. Compared to the level of state and local public services currently provided, what level would respondent prefer -- both for services in general and for a number of specific services?

III. FINANCE ISSUES

A. Perceptions of costs. How aware is respondent of direct and indirect property tax burdens?

B. Awareness of current financing arrangements. What proportion of the costs of a variety of services does respondent think are financed by property taxes?

C. Desired financing arrangements. Do respondents desire changes in the method of financing various public services? For each specific service, would they prefer increases in the proportion financed by user charges or state income or sales taxes?

D. Desired tax and spending levels. What percentage changes do respondents desire in total taxing and spending levels for overall state, municipal and school services?

IV. EFFICIENCY IN PUBLIC SERVICE DELIVERY

A. Perception of inefficiency. To what extent does respondent perceive state and local government to be inefficient and corrupt?

B. Amount of inefficiency. How much does respondent think services in general and certain specific services could be cut back without significantly affecting the quality and quantity of the services provided?

V. BENEFICIARIES OF PUBLIC SERVICES

A. Service usage. Which public services does respondent's household use?

B. Perception of other beneficiaries. To what extent does respondent think that members of certain groups currently receive their fair share of public services for the taxes they pay? Do certain groups benefit more now than they did in the past?

VI. ATTITUDES TOWARD GOVERNMENT AND TAXES

A. Attitudes toward taxes and finance arrangements. What is respondent's attitude toward various forms of taxes and service finance arrangements?

B. Perception of appropriate government role. What does respondent think the appropriate role of government is in a free enterprise economy? How much should citizens expect from their government?

VII. RESPONDENT CHARACTERISTICS

A. Demographic characteristics. What is respondent's educational level, occupation, family composition, income, race and religion?

B. Perception of financial well-being. Are respondents better off now than they were in the past? Do they expect to be better off in the future?

C. Housing characteristics. What kind of housing does respondent live in? What are the market and assessed values of owner-occupied housing and how much rent is paid for rental housing?

A preliminary questionnaire was pretested the weekend before the election. The pretest indicated that respondents had no problems understanding or answering any of the questions but that the survey took an average of 51 minutes to complete. As a result, a number of questions were eliminated or rewritten.

The final interviewing began Thursday, November 6. After approximately 300 interviews were completed, we discovered that the questionnaire was still too long, taking approximately 45 minutes to complete. Consequently, additional questions were eliminated while the interviewing was in progress. The final shortened questionnaire took approximately 30 minutes to complete.

A copy of the questionnaire is included. Questions that were eliminated after the interviewing started have been starred. It should be noted that one question was added at this time; this question has been circled.

LIEBERMAN RESEARCH SUBURBAN, INC. 7 HOLLAND AVENUE WHITE PLAINS, NEW YORK 10603

Job #2048-04 MASSACHUSETTS PROPOSITION 2½ STUDY November, 1980

Card 1

Time Started: ________

1a. Think about the services provided by the state or local government to residents of your town or city. For each service I read, please use the first list of words to tell me whether state or local government should be providing a lot less, a little less, the same amount, a little more or a lot more of this service. Remember, if government provides less services state or local taxes will be reduced, and if government provides more services, state or local taxes will be increased. If the service is not available to residents in your city or town, please let me know. Let's begin with ("X'd" ITEM). Which phrase in the first list describes how much more or less ("X'd" ITEM) state or local government should provide.

And now, how about (NEXT ITEM)? (RECORD. REPEAT FOR ALL ITEMS)

		Service Not Available	A Lot Less	A Little Less	The Same	A Little More	A Lot More	Don't Know
( )	Public elementary & high school education	0	1	2	3	4	5	9 -11
( )	Special education for children with learning problems	0	1	2	3	4	5	9 -12
( )	Fire fighting services	0	1	2	3	4	5	9 -13
( )	Police services	0	1	2	3	4	5	9 -14
( )	Courts and judges	0	1	2	3	4	5	9 -15
( )	Support of local public transportation	0	1	2	3	4	5	9 -16
( )	Regular garbage pick-up	0	1	2	3	4	5	9 -17
( )	Street and sidewalk repairs	0	1	2	3	4	5	9 -18
( )	Local public parks & recreation facilities	0	1	2	3	4	5	9 -19
( )	Mental health programs	0	1	2	3	4	5	9 -20
( )	Welfare or other public assistance programs	0	1	2	3	4	5	9 -21
( )	Adult education	0	1	2	3	4	5	9 -22
( )	Services for the elderly	0	1	2	3	4	5	9 -23
( )	After school programs for students, such as music and athletics	0	1	2	3	4	5	9 -24
☒	State and community colleges and universities	0	1	2	3	4	5	9 -25

2a. Now, please continue using List 1 to answer these questions. On an overall basis, how much more or less state services would you prefer to have? (RECORD)

2b. And on an overall basis, how much more or less local services would you prefer to have? (RECORD)

2c. And how much more or less does your local government currently provide in the way of services than it did two years ago? (RECORD)

2d. And how much more or less does your local government currently provide as compared to other nearby towns and cities? (RECORD)

2e. And how much more or less does your local government currently provide to your neighborhood as compared to other neighborhoods in your community? (RECORD)

		A Lot Less	A Little Less	The Same	A Little More	A Lot More	Don't Know
a.	Overall state services	1	2	3	4	5	9 -2
b.	Overall local services	1	2	3	4	5	9 -2
c.	Current vs. 2 years ago	1	2	3	4	5	9 -2
d.	Compared to nearby towns and cities	1	2	3	4	5	9 -2
e.	Compared to other neighborhoods	1	2	3	4	5	9 -3

31-33 BLANK

3a. As far as you know, please tell me approximately what percent of each of the services I read is financed by local property taxes. If you think all of it is financed then you'd say 100%, if none, 0%, if half 50%. You may give me any number from 0% to 100% to indicate how much of each service you think is financed by local property taxes. If you're not sure, just give me your best estimate. Let's begin with ("X'd" ITEM) (RECORD)

And how much of (NEXT ITEM) is financed by local property taxes? (RECORD. REPEAT FOR ALL ITEMS)

		Percent Financed By Local Property Taxes	
( )	Public elementary and high school education----------------------	______	34,35,36
( )	Special education for children with learning problems------------	______	37,38,39
( )*	Fire fighting services---	______	40,41,42
( )	Police services--	______	43,44,45
( )*	Courts and judges--	______	46,47,48
( )	Support of local public transportation---------------------------	______	49,50,51
( )*	Regular garbage pick-up--	______	52,53,54
( )*	Street and sidewalk repairs--------------------------------------	______	55,56,57
( )*	Local public parks and recreation facilities---------------------	______	58,59,60
( )*	Mental health programs---	______	61,62,63
( )	Welfare or other public assistance programs----------------------	______	64,65,66
( )*	Adult education--	______	67,68,69
( )*	Services for the elderly---	______	70,71,72
( )*	After school programs for students, such as music and athletics--	______	73,74,75
(X)	State and community colleges and universities--------------------	______	76,77,78

4a. For each service I read would you like to keep the financing the way it now is or to see a greater share of the money come from local property taxes, from state income taxes, from state sales taxes, or a greater share from fees paid by users of the service.

Please tell me which, if any, of the sources in your second list you think should bear a greater share of the costs of ("X'd" ITEM)? (RECORD)

79 BLANK
80-1 ID 1-4
Card 2

4b. And how about the costs of (NEXT ITEM)? (RECORD. REPEAT FOR ALL ITEMS.)

		Same as Now	Local Property Taxes	State Income Taxes	State Sales Taxes	User Fees	Other	Don't Know
( )	Public elementary and high school education---------------------------	0	1	2	3	4	5	9 - 5
( )	Special education for children with learning problems------------------	0	1	2	3	4	5	9 - 6
( )*	Fire fighting services----------------	0	1	2	3	4	5	9 - 7
( )	Police services-----------------------	0	1	2	3	4	5	9 - 8
( )*	Courts and judges---------------------	0	1	2	3	4	5	9 - 9
( )	Support of local public transportation	0	1	2	3	4	5	9 -10
( )*	Regular garbage pick-up---------------	0	1	2	3	4	5	9 -11
( )*	Street and sidewalk repairs-----------	0	1	2	3	4	5	9 -12
( )	Local public parks and recreation facilities-------------------------	0	1	2	3	4	5	9 -1
( )	Mental health programs----------------	0	1	2	3	4	5	9 -1
( )*	Welfare or other public assistance programs---------------------------	0	1	2	3	4	5	9 -1
( )	Adult education-----------------------	0	1	2	3	4	5	9 -1
( )*	Services for the elderly--------------	0	1	2	3	4	5	9 -1
( )	After school programs for students, such as music and athletics---------	0	1	2	3	4	5	9 -1
( )	State and community colleges and universities------------------------	0	1	2	3	4	5	9 -1

20-23 BLANK

* Questions eliminated after interviewing began

CARD 2

5a. Compared to what the state government now spends, by what percentage, if any, would you like to see state government taxing and spending increase or decrease. You may answer any percent increase or decrease from 1% to 100%. or tell me you want it to stay the same. (RECORD. MAKE SURE RESPONDENT IDENTIFIES WHETHER THE PERCENTAGE IS AN INCREASE OR DECREASE.)

5b. And by what percentage, if any, would you like to see local government taxing and spending increase or decrease? (RECORD)

5c. And by what percentage, if any, would you like to see local public school taxes and spending increase or decrease? (RECORD)

	Q. 5a State Government	Q. 5b Local Government	Q. 5c Local Public School
Increase	+____ 24-26	+____ 31-33	+____ 38-40
Decrease	-____ 27-29	-____ 34-36	-____ 41-43
Stay same	____ 30	____ 37	____ 44

6. Which phrase on list one, best describes property taxes in your community as compared to those in nearby cities and towns? (RECORD)

45
A lot less---------------1
A little less------------2
The same-----------------3
A little more------------4
A lot more---------------5
Don't know---------------9

7. Overall, by what percentage, if any, do you think your local government could cut taxes and spending without significantly cutting the amount of services? (RECORD)

% __________ 46-47

8. And by what percentage, if any, do you think state government could cut taxes and spending without significantly cutting the amount of services? (RECORD)

% __________ 48-49

9. Now let's talk about some specific services. People we've talked to believe that government could cut back spending on these services by eliminating waste, inefficiency and other problems. By what percentage, if any, do you think government could cut back spending on ("X'd" ITEM) without significantly affecting the quality or amount of services provided? (RECORD. REPEAT FOR ALL ITEMS.)

		Percent	
( )	Public elementary and high school education----------------------------	____	50-51
(✓)	Special education for children with learning problems------------------	____	52-53
( )	Adult education--	____	54-55
( )	Police services--	____	56-57
( )	Regular garbage pick-up--	____	58-59
( )	Street and sidewalk repairs--	____	60-61
( )	Welfare or other public assistance programs----------------------------	____	62-63
( )	State and community colleges and universities--------------------------	____	64-65
( )	After school programs for students, such as music and athletics--------	____	66-67

68-71 BLANK

10. In talking to people about the recent elections we found that a lot of people were not able to vote because they weren't registered, they were sick or out of town, or they just didn't have time.

10a. How about you -- did you vote in the elections this November?

72
Yes---------------1 - SKIP TO Q. 11
No----------------2] ASK Q. 10b
Don't remember---3]

10b. Were you registered to vote in this election?

73
Yes---------------1
No----------------2
Don't know-------9

11. As you probably know, there were a number of questions on the ballot that related to government spending and taxing. One of these was Question 2, called Proposition 2½, which would limit property taxes to 2½% of market value of property.

11a. Had you heard of this question before the election?

74
Yes---------------1
No----------------2
Don't know-------9

IF "YES" IN Q. 10a, -- VOTED IN ELECTION -- ASK Q. 11b OTHERWISE SKIP TO Q. 11f

11b. Did you vote on this question?

75
Yes---------------1
No----------------2] SKIP TO Q. 11f
Don't know-------9]

11c. How did you vote -- did you vote for or against Question 2, that is Proposition 2½?

76
For---------------1
Against-----------2
Don't remember---3

11d. In your opinion, is Proposition 2½ a constitutional amendment?

77
Yes---------------1 - SKIP TO Q. 12
No----------------2

11e. Would you have voted for or against Proposition 2½ if it had been a constitutional amendment?

78
For---------------1]
Against-----------2] SKIP TO Q. 12
Don't know-------9]

11f. If you had voted on Question 2, that is Proposition 2½, would you have been more likely to have voted for it or against it?

79
For---------------1
Against-----------2
Don't know-------9

IF YES IN Q. 10a -- VOTED IN ELECTION -- ASK Q. 12a OTHERWISE SKIP TO Q. 14a

12.* Another of these questions on the ballot was Question 4, which allows legislators to keep recent salary increases.

80-2 ID 1-4
Card 3

12a.* Did you vote on this question?

5
Yes---------------1
No----------------2] SKIP TO Q. 13
Don't know-------9]

12b.* How did you vote -- did you vote for or against Question 4?

6
For---------------1
Against-----------2
Don't remember---3

13.* Another was Question 5, which would prevent the state government from imposing certain costs on cities and towns.

13a.* Did you vote on this question?

7
Yes---------------1
No----------------2] SKIP TO Q. 14a
Don't know-------9]

13b.* How did you vote -- did you vote for or against Question 5?

8
For---------------1
Against-----------2
Don't remember---3

9-11 BLANK

* Questions eliminated after interviewing began.

14a.	Another question on the ballot was Question 3, which would limit state and local taxes and would increase the state share of education costs. Had you heard about this question before the election	12 Yes---------------1 No----------------2 Don't know-------9	

IF "YES" IN Q. 10a -- VOTED IN ELECTION -- ASK Q. 14b OTHERWISE SKIP TO Q. 14d.

14b.	Did you vote on this question?	13 Yes---------------1 No----------------2 Don't know-------9	 SKIP TO Q. 14d
14c.	How did you vote -- did you vote for or against Question 3?	14 For---------------1 Against-----------2 Don't remember---3	SKIP TO Q. 14e
14d.	If you had voted on Question 3, would you have been more likely to have voted for it or against it?	15 For---------------1 Against-----------2 Don't know-------9	

14e.* I will read you some of the effects that passage of Question 3 might have had in Massachusetts. Please look at list three that you wrote down from "agree a lot" to "disagree a lot". To what extent do you agree or disagree that passage of Question 3 would have led to ("X'd" ITEM)? (RECORD. REPEAT FOR ALL ITEMS.)

		Agree A Lot	Agree A Little	Disagree A Little	Disagree A Lot	Don't Know
( )	Lower state taxes than now--------------	4	3	2	1	9 -16
( )	More money for local public schools----	4	3	2	1	9 -17
( )	Slower growth of property taxes than now	4	3	2	1	9 -18
( )	More business and industry in Massachusetts-------------------------	4	3	2	1	9 -19
( )	Lower property taxes than now-----------	4	3	2	1	9 -20
(X)	Reform of state taxes-------------------	4	3	2	1	9 -21
( )	Slower growth of total taxing and spending in Massachusetts------------	4	3	2	1	9 -22
	ALWAYS ASK LAST					
	Benefits for my household on an overall basis---------------------------------	4	3	2	1	9 -23

15.* Now I'd like to talk to you about Proposition 2½. As you probably know, Proposition 2½ contains a number of provisions. Other people we have talked to have told us what they think is included. I'd like to read you some statements and have you tell me, based on everything you have heard or read, whether you think each of these is included or not included in Proposition 2½.

Does Proposition 2½ ("X'd" ITEM)? (RECORD. REPEAT FOR ALL ITEMS)

		(Yes) Included	(No) Not Included	Don't Know
( )	Limit property taxes to 2½% of full market value----------	1	2	[illegible] -24
( )	Cut auto excise taxes---------------------------------------	1	2	9 -25
( )	Allow tenants to deduct half of their annual rent on state income tax returns--	1	2	9 -26
( )	Limit state government taxes and spending-----------------	1	2	9 -27
( )	End binding arbitration for policemen and firemen---------	1	2	9 -28
(X)	Take away the power of school committees to set school budgets---	1	2	9 -29

30-33 BLANK

* Questions eliminated after interviewing began

Card 3

16. Next, I will read a list of some of the effects that the passage of Proposition 2½ might have in Massachusetts.

Look at list three that you wrote down from "agree a lot" to "disagree a lot". To what extent do you agree or disagree that Proposition 2½ will ("X'd" ITEM)? (RECORD. REPEAT FOR ALL ITEMS) (START WITH "X'd" ITEM AND CONTINUE UNTIL ALL ITEMS ARE RATED)

		Agree A Lot	Agree A Little	Disagree A Little	Disagree A Lot	Don't Know
( )	Lower property taxes in Massachusetts-	4	3	2	1	9 -34
( )	Increase Massachusetts state income taxes-------------------------------	4	3	2	1	9 -35
( )	Lower rents----------------------------	4	3	2	1	9 -36
( )	Make local government more efficient--	4	3	2	1	9 -37
( )	Decrease funds for local public schools------------------------------	4	3	2	1	9 -38
( )	Increase state sales taxes------------	4	3	2	1	9 -39
( )	Give state government more control over local matters------------------	4	3	2	1	9 -40
( )	Increase state aid to cities and towns	4	3	2	1	9 -41
( )	Give local voters more control over school spending---------------------	4	3	2	1	9 -42
( )	Attract more business and industry to Massachusetts----------------------	4	3	2	1	9 -43
(X)	Encourage the state legislature to reform Massachusetts taxes----------	4	3	2	1	9 -44

17. Overall, what do you think will be the single most important change caused by the passage of Proposition 2½ ?

____ 45
____ 46
____ 47
____ 48
____ 49

18. Overall, how do you think the passage of Proposition 2½ will affect your community -- do you think the services your local government offers will be cut back a lot, cut back a little, remain the same, increase a little or increase a lot?

50

Cut back a lot--------------1
Cut back a little-----------2
Remain the same-------------3
Increase a little-----------4
Increase a lot--------------5
Don't know------------------9

19a. Now that Proposition 2½ has passed, what do you think will happen to services I read. Using the first list of phrases tell me whether you think there will be a lot less, a little less, the same, a little more or a lot more ("X'd" ITEM) services now that Propositon 2½ has passed?

19b. And how about ("X'd" ITEM) services? (RECORD. REPEAT FOR ALL ITEMS)

		A Lot Less	A Little Less	The Same	A Little More	A Lot More	Don't Know
( )	Public elementary & high school education----	1	2	3	4	5	9 -51
( )	Special education for children with learning problems------------------------------------	1	2	3	4	5	9 -52
( )	Fire fighting services----------------------	1	2	3	4	5	9 -53
( )	Police services-----------------------------	1	2	3	4	5	9 -54
( )	Courts and judges---------------------------	1	2	3	4	5	9 -55
( )	Support of local public transportation-------	1	2	3	4	5	9 -56
( )	Regular garbage pick-up---------------------	1	2	3	4	5	9 -57
( )	Street and sidewalk repairs-----------------	1	2	3	4	5	9 -58
( )	Local public parks & recreation facilities---	1	2	3	4	5	9 -59
( )	Mental health programs----------------------	1	2	3	4	5	9 -60
( )	Welfare or other public assistance programs--	1	2	3	4	5	9 -61
( )	Adult education-----------------------------	1	2	3	4	5	9 -62
( )	Services for the elderly--------------------	1	2	3	4	5	9 -63
( )	After school programs for students, such as music and athletics----------------------	1	2	3	4	5	9 -64
(X)	State and community colleges and universities	1	2	3	4	5	9 -65

66-69 BLANK

20a. How about you and members of your household. Now that Proposition 2½ has passed, do you think the public services your household uses will be cut back a lot, cut back a little, remain the same, increase a little or increase a lot? (RECORD BELOW)

70
Cut back a lot-------------1
Cut back a little----------2
Remain the same------------3
Increase a little----------4
Increase a lot-------------5
Don't know-----------------9

21. How about the total amount of taxes your household pays -- now that Porposition 2½ has passed, do you think your household will be paying a lot less in taxes, a little less, about the same amount, a little more or a lot more in taxes? (RECORD)

71
A lot less-----------------1
A little less--------------2
Same amount----------------3
A little more--------------4
A lot more-----------------5
Don't know-----------------9

22 Overall, will your household be a lot worse off, a little worse off, about the same, a little better off, or a lot better off now that Proposition 2½ has passed? (RECORD)

72
Lot worse off--------------1
Little worse off-----------2
About the same-------------3
Little better off----------4
Lot better off-------------5
Don't know-----------------9

23. Now we'd like to get your opinions on tax and other government issues. For each statement I read, use the phrases in list three to tell whether you agree a lot, agree a little, disagree a little or disagree a lot with each statement. How much do you agree or disagree that ("X'd" ITEM)? (RECORD. REPEAT FOR ALL ITEMS)

		Agree		Disagree		Don't
		A Lot	A Little	A Little	A Lot	Know
( )	A graduated income tax is the best way for the state to raise money------------------------	4	3	2	1	9-73
( )	Corruption is common in my local government---	4	3	2	1	9-74
( )	People now on welfare could find jobs if they really tried--------------------------------	4	3	2	1	9-75
( )	Government interferes too much in peoples lives	4	3	2	1	9-76
( )	A cut in property taxes would benefit homeowners more than business and industry------	4	3	2	1	9-77
( )	Proposition 13 in California showed that taxes can be cut without cuts in services---------	4	3	2	1	9-78
( )	City or town employees are overpaid-----------	4	3	2	1	9-79

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Card 4

( )	The government should make sure that each family has enough to live on----------------	4	3	2	1	9 - 5
( )	It's okay for property taxes to rise as fast as the cost of living----------------------	4	3	2	1	9 - 6
( )	Corruption is common in my state government---	4	3	2	1	9 - 7
( )	The property tax is the best way for cities and towns to raise money for city services--	4	3	2	1	9 - 8
( )	When property taxes go up, landlords just raise rents---------------------------------	4	3	2	1	9 - 9
(X)	City or town employees don't work as hard as people who work for private companies-------	4	3	2	1	9 -10
( )	People expect too many services from government	4	3	2	1	9 -11
( )	Taxpayers in rich cities & towns should help pay for services in poorer cities & towns---	4	3	2	1	9 -12
( )	When business property taxes go up, businesses just raise their prices to consumers--------	4	3	2	1	9 -13
( )	State govt. should give more money to the cities and towns so local property taxes can be kept down------------------------------	4	3	2	1	9 -14
** ( )	The sales tax is a good way for the state to raise money----------------------------------	4	3	2	1	9 -15

16-18 BLANK 6

** Question added after Interviewing began

Card 4

24. Sometimes it seems that certain groups of people pay a lot in taxes but don't get very many services while others don't pay much in taxes but get a lot of services. Using the phrases in list one, please tell me whether ("X'd" GROUP) get a lot less than they pay for, a little less, the same amount as they pay for, a little more, or a lot more than they pay for. (RECORD UNDER COL. 24)

And how much do (NEXT GROUP) get compared to what they pay for? (RECORD. REPEAT FOR ALL GROUPS)

		Col. 24: Amount They Get					
		Lot Less	Little Less	Same Amount	Little More	Lot More	Don't Know
( )	Middle class families	1	2	3	4	5	9 -19
( )	Renters	1	2	3	4	5	9 -20
( )	Business and industry	1	2	3	4	5	9 -21
( )	Retired people	1	2	3	4	5	9 -22
( )	Poor families	1	2	3	4	5	9 -23
( )	Minority groups	1	2	3	4	5	9 -24
( )	Home owners	1	2	3	4	5	9 -25
(X)	Members of my household	1	2	3	4	5	9 -26

25. Now we'd like you to think about two years ago. Taking into account services they get for the taxes they pay are ("X'd" GROUP) better off, worse off or about the same now as they were two years ago? (RECORD. REPEAT FOR ALL GROUPS.)

		Better Off	Worse Off	About Same	Don't Know
( )	Middle class families	1	3	2	9 -27
( )	Renters	1	3	2	9 -28
( )	Business and industry	1	3	2	9 -29
( )	Retired people	1	3	2	9 -30
( )	Poor families	1	3	2	9 -31
( )	Minority groups	1	3	2	9 -32
( )	Home owners	1	3	2	9 -33
(X)	Members of my household	1	3	2	9 -34

26. We'd like to know a little about the people we talk to:

26a.	How many years have you been living in Massachusetts?	_________ years 35-36
26b.	...in the town you live in?	_________ years 37-38
26c.	Do you think you will be living in this town 5 years from now?	39 Yes----------1 No----------2 Don't know------9
27a.	Do you live in a single family house, a house with two or more families, an apartment, or what?	40 Single family house-----1 Two or more family------2 Apartment----------3 Condominium----------4 Town house----------5 Mobile home----------6 Other ____________ --7 (SPECIFY)
27b.	Do you rent your (ANSWER Q. 27a) or do you own it, or is there some other arrangement? IF OTHER (IN Q. 27b) ASK Q. 28	41 Rent----------1 -GO TO Q.29 Own----------2 -GO TO Q.30 Other----------3
28a.	Have you ever owned a home?	42 Yes----------1 No----------2
28b.	Do you plan to buy a home sometime in the next five years?	43 Yes----------1 No----------2 Don't know-------9 SKIP TO Q.31

44-46 BLANK

IF RENT (IN Q. 27b) ASK Q. 29.

29a. Have you ever owned a home?

47
Yes-------------1
No--------------2

29b. Do you plan to buy a home sometime in the next five years?

48
Yes-------------1
No--------------2
Don't know------9

29c. About how much rent do you pay each month?

$____________per month 49 - 52

29d. Does this include heat or any utilities?

53
Yes-------------1
No--------------2
Don't know------9

29e. If you had to guess, what percentage of your rent would you say goes to pay property taxes on the building you live in?

__________% 54-56

29f. Suppose property taxes on your (HOUSE/APARTMENT) went up $600 or about $50 a month. How much, if at all, do you think your rent would be increased on a monthly basis?

$___________ SKIP TO Q. 31 57-59

IF OWN (IN Q. 27b) ASK Q. 30

30a. Could you tell me the current market value of your (ANSWER IN Q. 27a). By this I mean about what price you could sell it for?

$____________ 60-65

30b. About what is the assessed value of your (ANSWER IN Q. 27a)?

$____________ 66-71

30c. Has your property been reassessed for property tax purposes in the last 2 years?

72
Yes--------------1
No---------------2
Don't know-------9

30d. About how much will you have to pay in property taxes this year?

$____________ 73-77

30e. How does this compare to the amount you paid in property taxes two years ago -- is it a lot more, a little more, about the same, a little less, or a lot less?

78
Lot more---------5
Little more------4
Same amount------3
Little less------2
Lot less---------1
Don't know-------9

31a. Including yourself, how many people live in your household?

____________people 79

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Card 5

31b. How many of these people are:

...less than 6 years old? ____________ 5
...between 6 and 17 years old? ____________ 6
...between 18 and 59 years old? ____________ 7
...60 years old and over? ____________ 8

IF ANY 17 YEARS OR UNDER, ASK:

31c. How many of the people under 18 are?

...attending public school? ____________ 9
...attending parochial school? ____________10
...attending private other than parochial school? ____________11

12-14 BLANK

Card 5

32. Which of the following services have you or other members of your household used regularly in the past year?

	Yes	No	Don't Know
Adult education	1	2	9 -15
Special education for children with learning problems	1	2	9 -16
State and community colleges and universities	1	2	9 -17
Local public transportation	1	2	9 -18
Local public parks and recreation facilities	1	2	9 -19
Mental health programs	1	2	9 -20
Welfare or other public assistance programs	1	2	9 -21
Services for the elderly	1	2	9 -22
After school programs for students such as music and athletics	1	2	9 -23

33. How old are you? ________years 24-25

34a. Are you currently employed? (IF YES: Is that on a full time or part-time basis?)

26
Full time---------1
Part time---------2
Not employed------3 -SKIP TO Q.34d

34b. Please tell me your exact job title?

Title: ____________________

34c. In what type of business or organization do you work?

Business:________________
SKIP TO Q. 35

34d. Were you ever employed before this? (IF YES: Was that on a full or part time basis?)

27
Full time---------1
Part time---------2
Not employed------3 -SKIP TO Q. 35

34e. Please tell me your exact job title in the last job you held?

Title: ____________________

34f. In what type of business or organization did you work?

Business;________________

35. What is the last grade of school you completed?

Write in: ________________

36. What is your marital status...are you single, married, widowed, divorced, separated, or other?

28
Single------------1 -SKIP TO Q.39a
Married-----------2 -ASK Q.37a
Widowed-----------3
Divorced----------4 -SKIP TO Q.39a
Separated---------5
Other-------------6

37a. Is your spouse currently employed? (IF YES: Is that on a full time or part time basis?)

29
Full time---------1
Part time---------2
Not employed------3 - SKIP TO Q.37d

37b. Please tell me the exact title of your spouse's job? (IF DOES NOT KNOW, ASK: Can you describe what he/she does?)

Title/Type of Work ________________

37c. In what type of business or organization does your spouse work?

Business________________
SKIP TO Q. 38

37d. Was your spouse ever employed before this? (IF YES: Was that on a full or part time basis?)

30
Full time---------1
Part time---------2
Not employed------3 -SKIP TO Q.38
Don't know--------9

37e. Please tell me the exact title of the last job at which your spouse worked. (IF DOES NOT KNOW, ASK: Can you describe what he/she did?)

Title: ________________

37f. In what type of business or organization did your spouse work?

Business ________________

31-34 BLANK

Card 5.

38. What is the last grade of school your spouse completed?

Write in ________________

39a. Do you, or your spouse, currently work for the town or city, county, state, or federal government, or for the public school system? (IF YES: For whom?)

YES 35
Town/city-------------1 -ASK Q.39b
County----------------2
State-----------------3
Federal---------------4
Public school---------5
Do not work for above-6
(2–6) SKIP TO INSTRUCTION BEFORE Q.40

IF YES TO TOWN/CITY IN Q. 39a, ASK Q. 39b

39b. What town or city is that?

____

IF VOTED IN ELECTION (Q.10a) ASK Q. 40 OTHERWISE SKIP TO Q. 41b

40. You mentioned earlier that you voted in the last election. Did you vote for President?

36
Yes-------------------1
No--------------------2

IF YES IN Q. 40, ASK:

41a. Who did you vote for? (RECORD UNDER COL. 41a)

IF NO IN Q. 40, ASK:

41b. If you had voted for President, who would you have voted for? (RECORD UNDER COL. 41b)

	Q. 41a 37	Q. 41b 38
Anderson-------	1	1
Carter---------	2	2
Clark----------	3	3
Commoner-------	4	4
Reagan---------	5	5
Refused--------	6	6
Don't know-----	9	9

42. How would you describe yourself politically? Would you say you are very conservative, fairly conservative, middle of the road, fairly liberal or very liberal?

39
Very conservative------1
Fairly conservative----2
Middle of the road-----3
Fairly liberal---------4
Very liberal-----------5
(DO NOT READ) Refused----------------6
(DO NOT READ) Don't know-------------9

43. To get an accurate picture of the people we interview, we need to know a little about their financial situation and income.

43a. Did you file a federal income tax return?

40
Yes--------------1 -ASK Q.43b
No---------------2 -SKIP TO Q.43c
(DO NOT READ) Refused----------3
(DO NOT READ) Don't know-------9

43b. Did you or anyone in your household file an itemized tax return last year?

41
Yes--------------1
No---------------2
(DO NOT READ) Refused----------3
(DO NOT READ) Don't know-------9

43c. Approximately what was your household's total income from all sources, before taxes last year?

$ ____________ 42-47
(DO NOT READ) Refused-----------1
(DO NOT READ) Don't know--------9

44a. Thinking back two years, would you say your household is a lot better off financially, a little better off, about the same, a little worse off, or a lot worse off now than you were two years ago?

48
Lot better--------1
Little better-----2
About the same----3
Little worse------4
Lot worse---------5
(DO NOT READ) Don't know--------9

44b. Think now to the next two years. Do you expect your household to be a lot better off financially, a little better off, about the same, a little worse off or a lot worse off two years from now than you are now?

49
Lot better--------1
Little better-----2
About the same----3
Little worse------4
Lot worse---------5
(DO NOT READ) Don't know--------9

Card 5

And now, a few questions for classification purposes.

45. Are you white, black, Hispanic or some other group?

50
White except hispanic---1
Black except hispanic---2
Hispanic----------------3
Other-------------------4
(DO NOT READ)Refused-----------------5

46. What is your religious affiliation...is it Protestant, Catholic, Jewish, or what?

51
Protestant--------------1
Catholic----------------2
Jewish------------------3
Mormon; L.D.S.----------4
None, no preference,
atheist----------------5
Other ______________--6
(DO NOT READ)Refused-----------------7

RECORD SEX:

52
Male--------------1
Female------------2

CHECK CITY:

53
Andover---------1
Arlington-------2
Attleboro-------3
Bellingham------4
Beverly---------5
Boston----------6
Braintree-------7
Brockton--------8
Brookline-------9
Cambridge-------0
Chelsea---------x
Clinton---------y

54
Dartmouth--------1
Dedham-----------2
Dudley-----------3
E. Longmeadow----4
Everett----------5
Fall River-------6
Framingham-------7
Greenfield-------8
Groton-----------9
Halifax----------0
Haverhill--------x
Holyoke----------y

55
Lawrence------1
Leominster----2
Lincoln-------3
Lynn----------4
Lynnfield-----5
Malden--------6
Medford-------7
Melrose-------8
Needham-------9
New Bedford---0
Newton--------x
North Hampton-y

56
Orleans------1
Oxford-------2
Peabody------3
Pembroke-----4
Provincetown-5
Quincy-------6
Randolph-----7
Revere-------8
Salem--------9
Sharon-------0
Somerset-----x
Springfield--y

57
Swansea---------1
Tewksburg-------2
Wakefield-------3
Walpole---------4
Waltham---------5
West
Springfield---6
Westfield-------7
Westport--------8
Worcester-------9
Yarmouth--------0

NAME: ______________________________

ADDRESS: ______________________________

CITY: ______________ STATE: __________ ZIP: __________

TELEPHONE NUMBER: __________ ______________________

TIME ENDED: ______________ DATE: / / 80 60-65

LENGTH OF INTERVIEW: __________58-59

80-5

Appendix C

INCOME ESTIMATION

Information on household income is often difficult to obtain in survey research projects. This was true of our study; of 1729 respondents, 528 did not report their income, either because they did not know it or because they refused to reveal it to the interviewer.

Many of our models do not use income as an explanatory variable and, consequently, are not affected by the missing income data. The absence of income data for almost a third of our sample, however, has direct implications for those models in which income enters as an explanatory variable. Simply eliminating those observations for which income was not reported introduces no bias provided the missing data are randomly distributed; this procedure does, however, reduce the precision (i.e. increases the standard errors) of all our coefficients.[1] To avoid this loss in precision, we substituted an estimated value of household income for each missing income value. Our income-estimation procedure is described in the following paragraphs.

Following the literature as much as possible given the limitations of our data, we modeled household income as a function of the age, education level, and race of the respondent and the sex, work status, and occupation of each adult head in the household. Two issues complicate the analysis. First, are the difficulties associated with the fact that in 396 cases we are missing the job status and occupation of the respondent's female mate. This additional missing data requires a subsidiary estimation procedure to predict female work status. Second, is the analytical issue of how to specify the model, and in particular, how to interact the relevant variables. We chose to interact sex, occupation, and work status, believing that the contribution to household income made by a worker in a particular occupation will vary with his or her work status (i.e. full-time or part-time) and possibly with the sex of the worker (because of labor market discrimination). The relatively small number of non-whites in our sample ruled out a further interaction with the worker's race.

---

[1] A full discussion of the potential gain in precision (both for the coefficients of the other explanatory variables and for that of income) resulting from our strategy of filling in the missing income data can be found in Zvi Griliches et. al., "Missing Data and Self-Selection in Large Panels", Harvard Institute of Economic Research Discussion Paper Number 573, September 1977. Because we believe that our missing data are approximately randomly distributed thoughout the population, we have chosen not to use the more complicated procedure proposed by Griliches, et. al., to fill in missing data.

1. Estimation of Female Work Status

After several hundred interviews were conducted, we determined that the final interview was taking longer to complete than was feasible given the financial constraints of this study. At that time we eliminated several items from the questionnaire, including the series of questions relating to mate's work status (full-time, part-time or not working) and occupation in cases where the respondent was a married male. Research suggests that in joint households status and economic situation are more likely to be defined by the male's occupation than the female's. Thus, in the final 1200 interviews, married female respondents provided information on the work status and occupation of themselves and their mates, while married male respondents provided this information only for themselves. The following table shows that work status is missing for 396 females in married households.

	Respondent		
	Married Female	Married Male	Total
Information on female work status obtained	525	174	699
Information on female work status not obtained	0	396	396
Total	525	570	1095

Our strategy was to estimate a model to explain the work status of the 699 women for whom this information was present and then to use this model to predict the work status of women for whom this information was missing.

We defined work status as a variable that takes on the value 1 if the woman works full-time, 2 if part-time, and 3 if she is not working. Although defined on the range 1 to 3, this variable is similar to a discrete choice variable and can be interpreted in probabilistic terms. In other words, a positive coefficient means that a positive change in an explanatory variable increases the probability that the woman is not working.

We hypothesize that the probabilty of a married woman not working is increased by the presence of children [measured by the number of children under six (CH6) and the number between six and seventeen (CH17)] and by the presence of a husband who is retired (RET), while the probability of a married woman working is increased by the presence of a husband who is unemployed (UNEMP) or underemployed (UNDEREMP). In addition, we hypothesize that the probability of working will vary by the husband's occupation (MOCC1 through MOCC7), with both the highest status and the lowest paying occupations being conducive to the employment of the wife; with the husband's education (MED1 through MED4); and with the husband's race (measured by BLHISP).

Because 28 of the 699 married women for whom work status was available were missing information on at least one of the independent variables, our prediction of work status is based on 671 observations. The final equation is reported in Table C-I. The two most important explanatory variables are the number of children under six and the presence of a husband who is retired. Most of the other variables have the expected signs but are not statistically significant at the 5 percent level.

The relatively low R^2 of 0.137 is not surprising given the nature of the dependent variable; work status takes on only 3 values while the estimated values are continuous.

To use the model to predict the (discrete) work status of the women for whom this informatio was missing, we had to define cut-off points for each work-status category. We did so by selecting the

Table C-I

ESTIMATING WORK STATUS FOR MARRIED WOMEN

```
MODEL:    EQ1                     SSE   448.633707       F RATIO           6.09
                                  DFE          653       PROB>F          0.0001
DEP VAR: FWS                      MSE     0.687035       R-SQUARE        0.1368

                             PARAMETER    STANDARD
VARIABLE            DF       ESTIMATE       ERROR         T RATIO      PROB>|T|

INTERCEPT            1       1.000000    0.828876          1.2065        0.2281
CH6                  1       0.278399    0.045836          6.0738        0.0001
CH17                 1       0.046132    0.031363          1.4709        0.1418
BLHISP               1       0.221387    0.214465          1.0323        0.3023
MOCC1                1       0.933393    0.840115          1.1110        0.2670
MOCC2                1       0.982045    0.839926          1.1692        0.2427
MOCC3                1       0.977286    0.847029          1.1538        0.2490
MOCC4                1       1.214826    0.858170          1.4156        0.1574
MOCC5                1       0.945380    0.837414          1.1289        0.2593
MOCC6                1       0.893379    0.848283          1.0532        0.2927
MOCC7                1       1.145891    0.852774          1.3437        0.1795
MED1                 1       0.186371    0.116579          1.5987        0.1104
MED2                 1      -0.147218    0.126586         -1.1630        0.2453
MED3                 1      -0.041866    0.132223         -0.3166        0.7516
MED4                 1      -0.104332    0.151773         -0.6874        0.4921
RET                  1       1.899751    0.844514          2.2495        0.0248
UNEMP                1       1.160564    0.846622          1.3708        0.1709
UNDEMP               1      -0.137184    0.256606         -0.5346        0.5931
```

where:

Work Status = discrete variable: 1 = work full time, 2 = work part time, 3 = unemployed
CH6 = number of children under 6
CH17 = number of children 6 to 17
MOCC1 = dummy, 1 = husband employed in professional, technical or kindred occupation
MOCC2 = dummy, 1 = husband employed as a manager or administrator
MOCC3 = dummy, 1 = husband employed in a sales occupation
MOCC4 = dummy, 1 = husband employed in a clerical occupation
MOCC5 = dummy, 1 = husband employed in a blue collar occupation
MOCC6 = dummy, 1 = husband employed in a service occupation
MOCC7 = dummy, 1 = husband employed, but occupation not reported
MED1 = dummy, 1 = husband has graduated from high school
MED2 = dummy, 1 = husband has some college or vocational degree
MED3 = dummy, 1 = husband is a college graduate
MED4 = dummy, 1 = husband has more than a college degree
RET = dummy, 1 = husband is retired, defined as not working and 62 or more years old
UNEMP = dummy, 1 = husband is unemployed and younger than 62
UNDEREMP = dummy, 1 = husband is underemployed (working only part time) and younger than 62
RACE = dummy, 1 = black or hispanic respondents

cut-offs that maximized the proportion of correct predictions in the sample of 671 observations.

Part-time work is the most ambiguous of the three categories; women holding part-time jobs might work either a few hours a week or nearly full-time. Because this category has so much potential for variation, any attempt to predict part-time status results in a high proportion of inaccurate predictions. Consequently, we eliminated the part-time work category and chose the cut-off point that maximized the percentage of correct classifications excluding the part-time work-status category.

We chose a cut-off point of 1.95 to separate full-time workers from non-working women. The following table shows the number of correct and incorrect classifications using this cut-off. More than half (56.9 percent) of the sample was correctly classified, which represents a substantial improvement over the 38 percent correct prediction rate we would have expected to obtain by chance $\left(\left(\frac{209}{671}\right)^2 + \left(\frac{128}{671}\right)^2 + \left(\frac{334}{671}\right)^2 = 0.38\right)$.

	Predicted Work Status		
Reported Work Status	Full-Time	Unemployed	Total
Full-time	113	96	209
Part-time	32	96	128
Unemployed	65	269	334
Total	210	461	671

Using the estimated model and the 1.95 cut-off point to predict the work status of the 396 women for whom this information is missing, we obtained the following results:

Predicted Work Status (for 396 observations)	
Full-time	24%
Not working	76%

These predicted values were then substituted for the missing values of work status in the income-estimation procedure.

2. Estimation of Household Income

Our strategy for filling in missing income data involved estimating a model of household income based on the largest possible sample and then using the model to predict the income of those cases in which household income is missing. Each of the explanatory variables in the model is a dummy variable that takes on the value 1 if the characteristic is present and 0 otherwise.

We modeled household income as a function of the age (AGE1 to AGE5), education level (EDUC1 to EDUC4), and race (BLACK, HISP) of the respondent and, where applicable, the respondent's mate. We refer to these adults as female and male household heads. Note that an individual household may have either a female or a male household head, or it may have both. Thus, we have two series of occupation variables for full-time workers, one for male household heads (MCONT1 to MCONT7) and one for female household heads (FCONT1 to FCONT7). The seven occupation categories are professional or technical; management or administrative; sales; clerical; blue-collar; service; and no occupation given. In addition, we include separate dummy variables for men and women working part-time, not working and retired (MWSPT, MUNEMP, MRET, FWSPT, FWEMP, FRET). Finally we include a variable that takes on the vlaue 1 if there are more than two adults in the household.

Table C-II reports the estimated equation based on 1179 cases for which data on all variables were available. The coefficients all follow the expected patterns and many are statistically significant. Household income increases with the age of the respondent up to age 65, it increases with the education level of the respondent, and it varies as expected by occupation category. In addition, for each category, the contribution of a male full-time worker exceeds that of a female worker.

Table C-II

ESTIMATING HOUSEHOLD INCOME

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MODEL:    EQ2                     SSE 3266[illegible]166460   F RATIO        10.24
                                  DFE         1145       PROB>F         0.0001
DEP VAR: Q43C                     MSE    285252547       R-SQUARE       0.2279
         INCOME

                             PARAMETER     STANDARD                                    VARIABLE
VARIABLE          DF          ESTIMATE        ERROR      T RATIO    PROB>|T|              LABEL

INTERCEPT          1      -453.322311     2936.467      -0.1544      0.8773
AGE1               1         1702.599     1832.017       0.9294      0.3529
AGE2               1         6554.688     1956.574       3.3501      0.0008
AGE3               1         7566.213     2083.924       3.6308      0.0003
AGE4               1         8221.788     2312.585       3.5552      0.0004
AGE5               1         4461.475     3700.951       1.2055      0.2283
MULTAD             1         8351.213     2398.299       3.4821      0.0005
BLACK              1       -64.887979      2256.67      -0.0288      0.9771
HISP               1         -6646.69     4806.885      -1.3827      0.1670
OTHRACE            1          -1220.3     4450.559      -0.2742      0.7840
EDUC1              1         3894.435     1819.455       2.1404      0.0325
EDUC2              1         6426.446     1962.121       3.2753      0.0011
EDUC3              1         7515.346     1986.178       3.7838      0.0002
EDUC4              1         15337.92     2242.848       6.8386      0.0001
MWSPT              1         1211.623     3272.108       0.3703      0.7112
MCONT1             1         12061.77     1850.103       6.5195      0.0001
MCONT2             1         18483.18     1936.903       9.5426      0.0001
MCONT3             1         12237.18     2843.975       4.3028      0.0001
MCONT4             1         9265.686     2973.092       3.1165      0.0019
MCONT5             1          10064.9     1809.038       5.5637      0.0001
MCONT6             1         6986.152     3326.386       2.1002      0.0359
MCONT7             1         7137.981     4727.957       1.5097      0.1314
MUNEMP             1         5166.241     2489.079       2.0726      0.0382
MPET               1         7111.817     3450.753       2.0609      0.0395
FCONT1             1         7800.643     2266.903       3.4411      0.0006
FCONT2             1         16724.53     2870.426       5.8265      0.0001
FCONT3             1         6932.622     4342.016       1.5966      0.1106
FCONT4             1         5544.717     2639.093       2.1010      0.0359
FCONT5             1         7003.158     3235.644       2.1644      0.0306
FCONT6             1       727.080231      3678.65       0.1976      0.8434
FCONT7             1         7341.707     2498.964       2.9379      0.0034
FWSPTZ             1         4389.817     2014.482       2.1791      0.0295
FUNEMP             1         4633.135     1581.982       2.9287      0.0035
FRET               1       139.173893     3321.355       0.0419      0.9666
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Table C-II (continued)

ESTIMATING HOUSEHOLD INCOME

Y = household income, measured in dollars
AGE1 = dummy variable, where 1=25 to 34 years old
AGE2 = dummy variable, where 1=35 to 44 years old
AGE3 = dummy variable, where 1=45 to 54 years old
AGE4 = dummy variable, where 1=55 to 64 years old
AGE5 = dummy variable, where 1=65 years old or older
MULTAD = dummy variable, where 1 = more than two adults in the household
BLACK = dummy variable, where 1 = black respondent
HISP = dummy variable, where 1 = Hispanic respondent
OTHRACE = dummy variable, where 1 = respondents who are something other than black, Hispanic or white
EDUC1 = dummy variable, where 1 = high school graduate
EDUC2 = dummy variable, where 1 = some college or vocational school
EDUC3 = dummy variable, where 1 = college graduate
EDUC4 = dummy variable, where 1 = graduate school
MWSPT = dummy variable, where 1 = male household head working part time
MCONT1 = dummy variable, where 1 = male household head working full-time in a professional or technical job
MCONT2 = dummy variable, where 1 = male household head working full-time in a management or administrative job
MCONT3 = dummy variable, where 1 = male household head working full-time at a sales job
MCONT4 = dummy variable, where 1 = male household head working full-time at a clerical job
MCONT5 = dummy variable, where 1 = male household head working full-time at a bule collar job
MCONT6 = dummy variable, where 1 = male household head working full-time at a service job
MCONT7 = dummy variable, where 1 = male household head working full-time, but no occupation given
MUNEMP = dummy variable, where 1 = male household head unemployed
MRET = dummy variable, where 1 = male household head retired
FCONT1 = dummy variable, where 1 = female household head working full-time at a professional or technical job
FCONT2 = dummy variable, where 1 = female household head working full-time at a management or administrative job
FCONT3 = dummy variable, where 1 = female household head working full-time at a sales job
FCONT4 = dummy variable, where 1 = female household head working full-time at a clerical job

FCONT5 = dummy variable, where 1 = female household head working full-time at a blue-collar job
FCONT6 = dummy variable, where 1 = female household head working full-time at a service job
FCONT7 = dummy variable, where 1 = female household head working full-time, but no occupation given
FWSPT = dummy variable, where 1 = female household head working part time
FUNEMP = dummy variable, where 1 = female household head unemployed
FRET = dummy variable, where 1 = female household head retired

The equation explains 23 percent of the variation in the dependent variable. Analysis of the errors shows that the model explains incomes under $50,000 well and those over $50,000 poorly (see Figure 1). This is not surprising since much of the income of higher income households represents income from saving which would not be captured by the model. Because most respondents have household incomes below $50,000, we are confident that the equation is adequate for our purpose of estimating missing income data.